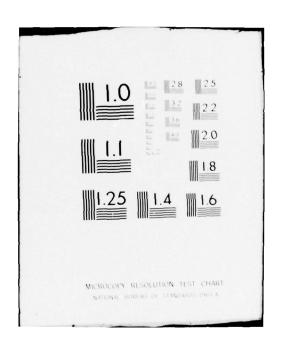
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OCCUPATIONAL SURVEY REPORT.



AGM-69A MISSILE ANALYST AND MISSILE ELECTRONIC EQUIPMENT CAREER LADDER

AFSCs 316X0T/316X2T

AFPT-90-316-354

OCCUPATIONAL SURVEY BRANCH USAF OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TEXAS 78148

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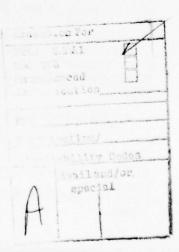
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PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the AGM-69A Missile Systems Analyst (AFS 316X0T) and Missile Electronic Equipment (AFS 316X2T) Specialties. The project was requested by HQ ATC/TTM to obtain current task data on skill level groups, with primary emphasis being on the 5-skill level. Authority for conducting occupational surveys is contained in AFR 35-2. Computer outputs from which this report was produced are available for use by operating and training officials.

Computer programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

The Air Force occupational survey program has been in existence since 1956 when initial research was undertaken by AFHRL (Air Force Systems Command) to develop a methodology for gathering and analyzing occupational information.

In 1967, an operational survey program was established within the Air Training Command and surveys were produced annually for 12 enlisted specialties. In 1972, the program was expanded to conduct occupational surveys covering 51 career fields annually. In late 1976, the program was again expanded to include the survey of officer utilization fields, to permit special management applications projects, and to support interservice or joint service occupational analysis.

The survey instrument used in the present project was developed by Second Lieutenant Robert L. Landry, Inventory Development Specialist. Second Lieutenant Gordon J. Curphy analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Analysis Section, Occupational Survey Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78148.

Copies of this report are available to air staff sections, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Survey Branch (OMY), Randolph AFB, Texas 78148.

This report has been reviewed and is approved.

BILLY C. McMASTER, Col, USAF Commander USAF Occupational Measurement Center WALTER E. DRISKILL, Ph.D. Chief, Occupational Survey Branch USAF Occupational Measurement Center

SUMMARY OF RESULTS

- 1. Survey Coverage: Inventory booklets were administered to incumbents in both the AGM-69A Missile Systems Analyst (316X0T) and Missile Electronic Equipment (316X2T) career ladders during the period February to May 1979. Survey results are based on responses from 664 AFS 316X0T incumbents (86 percent of assigned) and 76 AFS 316X2T incumbents (86 percent of assigned). A majority of the incumbents surveyed (98 percent) were assigned to SAC.
- 2. Career Ladder Structure: Four clusters and five independent job types were identified. Missile Systems Analysts (316X0T) made up three of the clusters and all of the independent job types. These three clusters consisted of Missile Maintenance Supervisors, Flightline Maintenance Personnel, and Booster Section Personnel. The independent job types included Quality Control Personnel, Maintenance Analysis Personnel, Munitions Control Personnel, Test and Evaluation Personnel, and Tool Room Members. Missile Electronic Equipment Specialists (316X2T) made up the fourth cluster, which were the Verification and Checkout of Equipment (VACE) Personnel. These incumbents were responsible for the maintenance of the electronic equipment used by 316X0T personnel to repair the SRAM.
- Career Ladder Progression: AFS 316X0T and AFS 316X2T were differentiated by the duties and tasks performed. Generally, DAFSC 316X0T tasks involved the maintenance of the SRAM, while DAFSC 316X2T tasks involved the maintenance of the electronic equipment used by the 316XOT personnel. Equipment used also separated the two ladders, with a much larger percentage of 316X2T personnel using electronic analysis equipment, such as oscilloscopes and distortion analyzers, than the 316XOT personnel. The jobs performed by 3163OT and 31650T personnel were essentially the same, with heavy emphasis on flightline, booster, and general maintenance. Seven-skill level incumbents spent 68 percent of their job time on supervisory and administrative related tasks, with the remaining 32 percent spent on technical or general maintenance tasks. Jobs performed by 31632T and 31652T were also essentially the same, with primary emphasis of SRAM electronic equipment and general maintenance. Seven-skill level incumbents spent 38 percent of their job time on supervisory tasks, with the remainder spent on primarily technical tasks involving electronic equipment repair. Finally, 9-skill level incumbents spent 95 percent of their job time on supervisory or administrative tasks, and only five percent of their time on technical or general maintenance tasks.
- 4. AFMS Groups: For the 316X0T personnel, a typical trend of increasing percentage of time spent on supervisory tasks with increasing TAFMS was revealed. However, technical tasks involving flightline, booster, and general maintenance made up at least 50 percent of the job time up to the fifth enlistment group (193-240 months TAFMS). The 316X2T personnel increased the percentage of time spent on supervisory

tasks up to the third enlistment (97-144 months TAFMS) and then the percentage leveled off. None of the incumbents in this career ladder reported spending a majority of their time on supervisory tasks.

- 5. AFR 39-1 Evaluation: AFR 39-1 was fairly accurate in portraying the jobs found in the 316X0T career ladder, with the exception of some tasks performed by the Test and Evaluation Personnel and the Tool Room Members. The tasks of evaluating the maintenance of the SRAM and other systems, such as the Air Launched Cruise Missile, should be considered for inclusion in the next 316X0T AFR 39-1 Specialty Description revision.
- 6. Comparison to Previous AFS 316X2T Study: Overall, the 316X2T career ladder has remained fairly stable since the previous survey. The current 316X2T career ladder structure and the earlier 1974 316X2T career ladder structure were found to be very similar. The current survey further breaks down the VACE Mechanics found in the CAREER LADDER STRUCTURE by aircraft; these being B-52 VACE Mechanics and FB-111 VACE Mechanics.
- 7. Job Attitudes: Expressed job interest is higher for AFS 316X2T first enlistment personnel than for AFS 316X0T first-term personnel. However, very few AFS 316X2T first-term incumbents intend to reenlist (19 percent versus 29 percent for AFS 316X0T and 36 percent for a comparative sample of other specialties). This may suggest serious career manning problems in the future.

OCCUPATIONAL SURVEY REPORT AGM-69A MISSILE ANALYST AND MISSILE ELECTRONIC EQUIPMENT SPECIALTIES (AFSCs 316X0T/316X2T)

INTRODUCTION

This is a report of an occupational survey of the AGM-69A Missile Analyst (AFS 316X0T) and Missile Electronic Equipment (AFS 316X2T) specialties completed by the Occupational Survey Branch, USAF Occupational Measurement Center, in September 1979. A previous study of the AFS 316X2T specialty was published in October 1974 as part of a survey of the total AFS 316X2 ladder (AFS 316X2 F/G/H/Q/T). No previous survey has been conducted on the 316X0T specialty.

Historically, both the 316X0T and 316X2T specialties were created on 1 July 1968, and AFSC designations have remained the same since that time. Only at the 9-skill level have AFSC changes occurred. The original 9-skill level designation when the specialties were created was AFSC 31692 and lasted until 1 July 1969. AFSC 31790 was the designation indicative of 9-skill level incumbents from 1 July 1969 to 30 April 1976. The designation then changed again and became 31693 from 30 April 1976 to 30 April 1979. Currently, AFSC 31699 is used to designate these incumbents.

The 316X0T personnel are responsible for maintaining the AGM-69A (SRAM) missile system, and the 316X2T personnel maintain the electronic equipment utilized by the 316X0T personnel. Most of the incumbents in these two specialties learn about the SRAM via the Technical Training Schools located at Chanute AFB, Illinois. Both specialties have Catagory A schools, with 316X0T technical training being 102 days in length and 316X2T technical training being 105 days long. The annual training requirements were 150 316X0T personnel and 30 316X2T personnel; however, reduced manpower levels for 1979 have cut the training requirements to 50 316X0T personnel and 12 316X2T personnel.

The current project was designed to answer requests from the field concerning tasks performed by AFSC 31650T/31652T personnel. Topics discussed in this report include: (1) survey methodology, (2) job structure within the two ladders, (3) an analysis of skill level groups including a comparison of the two ladders, and (4) a comparison of the current survey with the previous survey.

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SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-316-354. As a starting point, 316X2T tasks from the 1974 316X2F/G/H/Q/T inventory were reviewed for currency. Additional 316X2T tasks were developed through research of specialty publications and directives. A tentative task list was then formulated and taken out to the field for validation. Inventory development specialists conducted interviews with seven 316X2T subject matter specialists at three different facilities. From these interviews, a new 316X2T specialty task list was finalized.

Since no previous survey of the 316X0T specialty had been accomplished, a tentative task list for this specialty was formulated by reviewing AFR 39-1 Specialty Descriptions and 316X0T specialty publications and directives. This tentative 316X0T task list was then taken out to the field and reviewed and finalized by approximately 25 316X0T subject matter specialists of various skill levels.

Once the 316X2T and 316X0T task lists were finalized, the two task lists were combined into a single inventory of 436 tasks grouped under 12 duty headings. Also included was a background section which requested such information as duty title, job interest, and Total Active Federal Military Service (TAFMS).

Survey Administration

Job inventories were administered worldwide to all job incumbents holding DAFSCs 316X0T and 316X2T. Personnel were identified on a computer mailing list from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL). Consolidated Base Personnel Offices at all operational bases having 316X0T/316X2T personnel administered the inventory from February to May 1979.

Each individual surveyed was given careful instructions to insure standardization of responses. Respondents first completed an identification and biographical information section (background section), and then proceeded to check each task performed in their current job. Once all tasks an incumbent performed were checked, the incumbents then rated each task on a nine-point scale as to relative percent time spent on that task as compared to all other tasks checked. The ratings ranged from one (very small amount of time spent) to nine (very large amount of time spent). A rating of five represented an average amount of time spent.

To determine the relative time an incumbent spends on each task, all of the incumbents ratings are assumed to account for 100 percent of his or her time spent on the job. The ratings are then summed and

each task rating is then divided by the total number of task responses and the quotient is multiplied by 100. This procedure provides a basis for comparing tasks, not only in terms of percent members performing a particular task, but also, in terms of average percent time spent performing any given task or group of tasks.

Survey Sample

All DAFSC 316X0T and 316X2T personnel were selected to participate in this survey. Table 1 reflects the percent distribution, by major command, of the assigned personnel in the 316X0T/X2T specialties. Most of the personnel were assigned to the Strategic Air Command (SAC), since SAC is the primary command that utilizes the AGM-69A missile system. The 664 316X0T respondents comprised 86 percent of the 774 members assigned to the 316X0T specialty. The 76 316X2T respondents comprised 86 percent of the 88 members assigned to that specialty. Table 2 reflects the distribution of assigned personnel by DAFSC. Table 3 reflects the distribution of respondents by Active Federal Military Service (AFMS) groups for each specialty. As shown, the final survey provided an accurate representation of job incumbents within the 316X0T/X2T specialties.

TABLE 1
COMMAND REPRESENTATION OF SAMPLE SURVEY

	AFS 31	6X0T		AFS 31	6X2T	
	PERCENT	PERCENT		PERCENT	PERCENT	
COMMAND	ASSIGNED	SAMPLED		ASSIGNED	SAMPLED	
SAC	96	98		92	94	
ATC	4	2		7	6	
OTHER	*	*		1	*	
	TOTAL 316	XOT ASSIGNED:	774	TOTAL 316	X2T ASSIGNED:	88
	TOTAL 316	XOT SAMPLED:	664	TOTAL 316	X2T SAMPLED:	76
		16XOT SAMPLED:	86%	PERCENT 3	16X2T SAMPLED:	86%

NOTE: DAFSC 31699 AND CEM CODE 31600 PERSONNEL ARE NOT INCLUDED IN THESE STATISTICS * INDICATES LESS THAN ONE PERCENT

TABLE 2

DAFSC REPRESENTATIONS OF THE SPECIALTY SAMPLE

DAFSC	NUMBER* ASSIGNED	NUMBER SURVEYED	PERCENT OF ASSIGNED SURVEYED
31630T	53	53	100%
31650T	492	404	82%
31670T	222	207	93%
31632T	12	11	92%
31652T	45	44	98%
31672T	30	21	70%

* AS OF APRIL 1979

TABLE 3
TAFMS DISTRIBUTION OF SURVEY SAMPLE

			MONTHS TI	ME IN SERV	ICE	
	1-48	49-96	97-144	145-192	193-240	241+
NUMBER IN AFS 316XOT SAMPLE	301	182	72	59	40	8
PERCENT OF AFS 316X0T SAMPLE	45%	27%	11%	9%	6%	1%
NUMBER IN AFS 316X2T SAMPLE	41	20	4	8	3	
PERCENT OF AFS 316X2T SAMPLE	54%	26%	5%	11%	4%	-

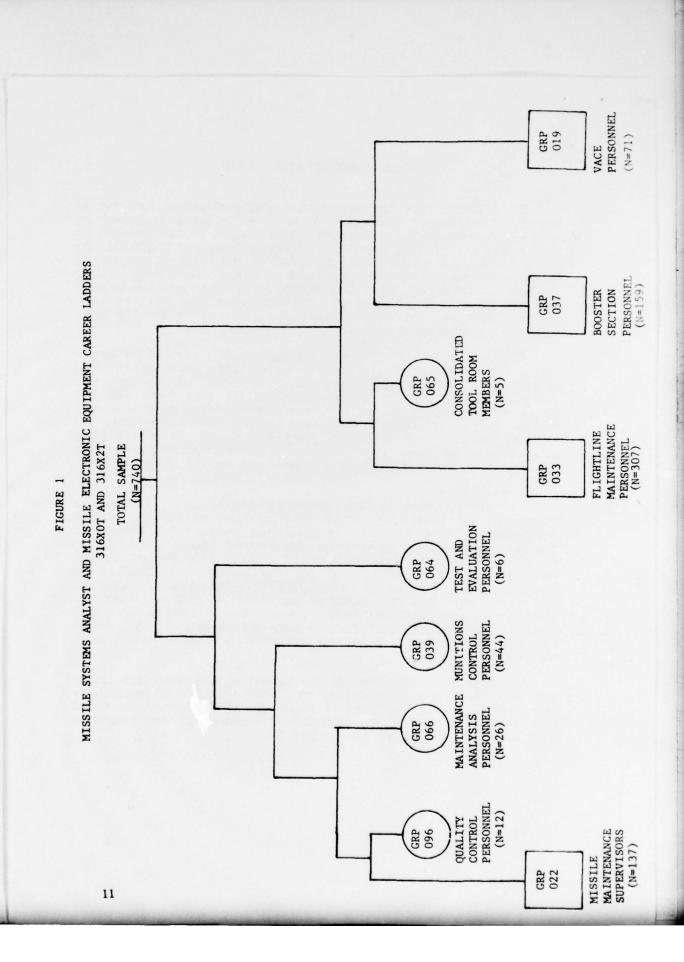
CAREER LADDER STRUCTURE

By analyzing the task descriptions and background data for all relevant job groups, the major types of work being performed by specialty incumbents were identified. This analysis is made possible by the Comprehensive Occupational Data Analysis Programs (CODAP). By using CODAP, job functions are identified on the basis of similarity in tasks performed and relative time spent performing these tasks. Using the job structure as a starting point, it is then possible to first describe the career ladder as it presently exists, and then, in turn, evaluate the pertinent career ladder documents, such as AFR 39-1, Specialty Descriptions and the Specialty Training Standard.

The career ladder structure analysis process consists of determining the functional job structure of career ladder personnel in terms of job types, clusters, and independent job types. A job type is a group of individuals who perform many of the same tasks and also spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as clusters. Finally, there are often cases of specialized job types that are too dissimilar to be grouped into any cluster. These fairly unique groups are labeled independent job types.

The job structure for the 316X0T and 316X2T career ladders was determined by performing a job type analysis of the 740 survey respondents. This analysis identified four primary job groups or clusters: (1) Missile Maintenance Supervisors (AFSC 316X0T); (2) Flightline Maintenance Personnel (AFSC 316X0T); (3) Booster Section Personnel (AFSC 316X0T); and (4) Verification and Checkout of Equipment (VACE) Personnel (AFSC 316X2T). This structure suggests that tasks performed by technical personnel in each of these two specialties clearly distinguish each of these ladders. Only at the 9-skill level, which involve primarily supervisory and managerial tasks, do the jobs become sufficiently similar for personnel from both ladders to be included in one group.

Based on task similarity and the amount of time spent in performing each task, the jobs performed by 316X0T and 316X2T respondents are listed below and illustrated in Figure 1. (GRP numbers are shown with each group as a cross reference to computer printed summaries used in the analysis of the survey data.)



- MISSILE MAINTENANCE SUPERVISORS (GRP022, N=137)
 - A) SRAM Systems Superintendents (GRP091, N=49)
 - B) NCOICs Consolidated Tool Room (GRP128, N=6)
 - C) NCOICs Missile Checkout Section (GRP081, N=14)
 - D) NCOICs Munitions Control (GRP133, N=16)
 - E) NCOICs SRAM Analysis Section (GRP160, N=10)
 - F) SRAM Maintenance Superintendents (GRP076, N=12)
- II. QUALITY CONTROL PERSONNEL (GRP096, N=12)
- III. MAINTENANCE ANALYSIS PERSONNEL (GRP066, N=26)
- IV. MUNITIONS CONTROL PERSONNEL (GRP039, N=44)
- V. TEST AND EVALUATION PERSONNEL (GRP064, N=6)
- VI. FLIGHTLINE MAINTENANCE PERSONNEL (GRP033, N=307)
 - A) B-52 Aircraft Checkout Team Chiefs (GRP099, N=64)
 - B) B-52 Aircraft Checkout Mechanics (GRPO95, N=195)
 - C) FB-111 Weapons Release Team Chiefs (GRP281, N=14)
 - D) FB-111 Weapons Release Team Members (GRP259, N=23)
- VII. CONSOLIDATED TOOL ROOM MEMBERS (GRP065, N=5)
- VIII. BOOSTER SECTION PERSONNEL (GRP037, N=159)
 - IX. VERIFICATION AND CHECKOUT OF EQUIPMENT (VACE) PERSONNEL (GRP019, N=71)
 - A) FB-111 VACE Mechanics (GRP210, N=5)
 - B) B-52 VACE Mechanics (GRP314, N=39)
 - C) VACE NCOICs (GRP359, N=17)

The respondents forming these job types and clusters account for 96 percent of the survey sample. The remaining four percent of the sample consists of unique jobs which did not group with any of the job types or clusters described above. The majority of these personnel held either DAFSC 316X0T or possessed the T-prefix and were the training instructors who taught the 316X0T or 316X2T technical courses at Chanute AFB, Illinois. These personnel did not group with any cluster or independent job type because the jobs they performed were so heterogeneous.

Cluster and Independent Job Type Descriptions

Brief descriptions of each of the clusters and independent job types are presented below, followed by a brief description of the primary job types which combine to form the cluster. The relative percent time spent on each duty by each of the clusters and independent job types is shown in Table 4, with selected background information for each of these groups shown in Table 5. Table 6 shows the perceptions of each of these groups in terms of how interesting they find their job, the degree to which they perceive their talents and training are utilized, and whether or not they plan to reenlist.

I. MISSILE MAINTENANCE SUPERVISORS (GRP022). Almost 93 percent of the 137 individuals in this cluster held either DAFSC 31670T, 31699, or CEM Code 31600. Group members averaged 201 months TAFMS, and their average paygrade was 6.5. The incumbents in this cluster were either the managers of both the 316X0T/X2T ladders or the supervisors of 316X0T personnel. Table 4 reflects that these incumbents spent 69 percent of their job time performing supervisory duties. Typical tasks for this cluster were managerial and supervisory in nature, such as compiling information for staff studies and supervising DAFSC 316X0T personnel. The average number of personnel supervised was 4.3, which was the highest of all clusters and independent job types. Table 6 reveals that 78 percent of these respondents found their job interesting and 71 percent perceived their training was being utilized fairly well or better.

Within this cluster, individuals were further divided into six distinct job types, which include: (1) SRAM Systems Superintendents; (2) NCOICs Consolidated Tool Room; (3) NCOICs Missile Checkout Section; (4) NCOICs Munitions Control; (5) NCOICs SRAM Analysis Section, and (6) SRAM Maintenance Superintendents. (Tables I, II, and III in Appendix A provide various background and duty information about each of these job types.)

SRAM Systems Superintendents managed both the 316X0T and 316X2T career ladders. These personnel spent 23 percent of their time directing and implementing, and common tasks include determining work priorities, assigning personnel to duty positions, and planning or scheduling work assignments. Also, these incumbents supervised an average of 5.4 personnel, which was the highest average noted for job types in this cluster.

Eighty-three percent of the NCOICs Consolidated Tool Room group were E-6s. These personnel perform tool related tasks, such as performing equipment inspections and tagging serviceable and unserviceable equipment. NCOICs Missile Checkout Section were responsible for supervising Base Missile Checkout Shop activities. Supervisory and technical tasks were commonly performed by these respondents, and include directing Missile Systems Checkout Shop activities and operating the AN/GSM-133 test adapter set. NCOICs Munitions Control personnel seem to be responsible for insuring the various aspects of SRAM maintenance are completed, and, in addition, perform some SRAM security functions. Common tasks include: coordinating work between duty sections; updating parts status boards; and maintaining classified files. NCOICs SRAM Analysis Section had the responsibility of analyzing maintenance trends and insuring missile computers are operating correctly. At least 90 percent of these incumbents calculate using octal and binary numbering systems, and it was noted that no other job type

had more than 25 percent performing these tasks. Finally, 92 percent of the SRAM Maintenance Superintendents reported having DAFSC 31699 or CEM Code 31600. These personnel were responsible for managing all personnel associated with the SRAM system. These personnel spent 85 percent of their job time on the organizing and planning, directing and implementing, and evaluating duties. Common tasks performed include: conducting staff meetings; supervising personnel other than DAFSC 316XX; and coordinating work between duty sections. These personnel were differentiated from SRAM Systems Superintendents by the lack of technical tasks performed.

- II. QUALITY CONTROL PERSONNEL (GRP096). Fifty percent of the 12 respondents in this independent job type were working at the Headquarters level, and 92 percent held DAFSC 31670T. These personnel were responsible for insuring that the operational and maintenance standards for the SRAM system were being met. Table 4 reveals that 42 percent of their job time was spent performing evaluative tasks. At least 90 percent of these respondents performed equipment, technical, and activities inspections. It was noted from Table 6 that these incumbents felt their training was being utilized fairly well or better (82 percent) and 84 percent thought their job was interesting. Also, 76 percent of these incumbents planned to reenlist, which was the highest for all clusters and independent job types.
- III. MAINTENANCE ANALYSIS PERSONNEL (GRP066). These 26 individuals were responsible for analyzing maintenance trends in the SRAM systems. Almost 72 percent of their job time was spent on only 20 tasks, and these tasks were primarily evaluative or administrative in nature. Common tasks includes: analyzing maintenance trends; making entries in missile or aircraft historical records; and planning or preparing briefings. Table 5 reveals that four percent of these incumbents held DAFSC 31630T, 54 percent of these incumbents held DAFSC 31650T, and 42 percent held DAFSC 31670T. The average AFMS was 81 months, and a majority of these incumbents (69 percent) felt their training was utilized at least fairly well.
- IV. MUNITIONS CONTROL PERSONNEL (GRP039). It was noted that these 44 respondents perform tasks indicative of supervisors. However, their average pay grade was only 4.5; the average number of personnel supervised was less than one; 67 percent held DAFSC 31650T; and the average TAFMS was 84 months. These respondents seem to be responsible for coordinating the work for all of the missile related duty sections so that the SRAM system maintains operational readiness. Common tasks performed include: coordinating work between duty sections; recording awaiting maintenance (AWM) items on status boards; and determining work priorities.
- V. TEST AND EVALUATION PERSONNEL (GRP064). Sixty-seven percent of these six respondents were stationed at the 4200th Test and Evaluation Squadron located at Edwards AFB, California. These incumbents were responsible for testing and evaluating both the SRAM system and the Air Launched Cruise Missile.

These incumbents spent 81 percent of their job time on only 20 tasks, some of which include evaluating technical data; improving work methods and procedures; and compiling information for reports and staff studies. Table 5 reveals the average TAFMS was 80 months and there were three incumbents possessing DAFSC 31650T, two with DAFSC 31670T, and one DAFSC 31699. A majority (83 percent) of the group members felt their talents were being utilized very little or not at all, and only 34 percent reported their job as interesting (see Table 6).

VI. FLIGHTLINE MAINTENANCE PERSONNEL (GRP033). This cluster of 307 316X0T respondents was the largest in the survey. These incumbents were responsible for maintaining the operational readiness of both the aircraft equipment used to launch the SRAM, and the SRAM itself. Common tasks were: performing FIRT scoring data retrieval with printer; removing or installing aircraft equipment; and performing mission data insertion procedures. Table 5 reveals that 73 percent of these incumbents held DAFSC 31650T. The average AFMS was 57 months, and 41 percent planned to reenlist.

In this cluster, four distinct job types were found. These included: (1) B-52 Aircraft Checkout Team Chiefs; (2) B-52 Aircraft Checkout Mechanics; (3) FB-111 Weapons Release Team Chiefs; and (4) FB-111 Weapons Release Team Members. Tables IV, V, and VI in Appendix A provide comparative duty and background data about these four job types.

B-52 Aircraft Checkout Team Chiefs were responsible for insuring the operational readiness of the B-52 SRAM launch and monitoring equipment, and the SRAM itself. These incumbents performed both supervisory and technical tasks, with 90 percent of these incumbents supervising either DAFSC 31630T or 31650T personnel. Common tasks include performing pre-operational checks on SRAM systems and performing carrier aircraft equipment checkout tests.

B-52 Aircraft Checkout Mechanics worked in conjunction with B-52 Aircraft Checkout Team Chiefs to insure B-52 launching and monitoring equipment and the SRAM were operating correctly. Table IV in Appendix A reveals that less than 12 percent of their job time was spent on supervisory duties while 45 percent was spent on flightline maintenance tasks. Common tasks include: removing or installing carrier aircraft equipment; performing Inertial Measurement Unit (IMU) confidence tests on B-52s; performing system interface tests on B-52s; and performing manually simulated launch procedures.

FB-111 Weapons Release Team Chiefs were responsible for the FB-111 launch and monitoring equipment and the SRAM operational readiness. These individuals primarily performed the same tasks as the B-52 Aircraft Checkout Team Chiefs, with the exception of tasks unique to the B-52 or FB-111 aircraft. Common tasks include supervising DAFSC 31630T and 31650T personnel and performing integrated test procedures on FB-111s. These incumbents perform an average of 75 tasks and 21 percent held DAFSC 31670T.

- FB-111 Weapons Release Team Members worked in conjunction with FB-111 Weapons Release Team Chiefs in maintaining the SRAM and FB-111 launch and monitoring equipment. Common tasks include: performing FIRT Scoring data retrieval with printer; performing weapons systems test procedures on FB-111s; performing SRAM station data entry procedures on FB-111; and performing physical inspections of the aircraft. It was noted that 95 percent of these respondents held DAFSCs 31630T or 31650T. Table VI in Appendix A reveals that only 32 percent of these incumbents planned to reenlist.
- VII. CONSOLIDATED TOOL ROOM MEMBERS (GRP065). Table 4 shows that these five incumbents spent almost 70 percent of their job time performing administrative or general shop tasks. These respondents seem to be primarily responsible for maintaining and issuing equipment used to repair the SRAM. Tasks performed by a least 60 percent of these incumbents include: issuing, cleaning, painting, and receiving tools and equipment; and tagging serviceable and unserviceable equipment. Table 5 reveals the average AFMS was 44 months for these incumbents, and the average paygrade was 3.4. Only 20 percent of these incumbents felt their training was being utilized; however, 60 percent planned to reenlist. These respondents were differentiated from NCOICs Consolidated Tool Room by the lack of supervisory tasks performed.
- BOOSTER SECTION PERSONNEL (GRP037). VIII. The 159 respondents in this cluster were primarily responsible for maintaining the electronic, control, protection, and propulsion systems of the SRAM. Both supervisory and technical tasks were performed by the respondents in this cluster, but no distinct job types were found that separated the supervisors and workers. Common tasks include: operating a GSM-133; removing or installing booster section test stands; removing or installing guidance electronics; and removing or replacing patch panels. The average TAFMS for this cluster was 51 months (Table 5) and 70 percent felt their training was utilized at least fairly well (Table 6). Approximately three-fourths of this cluster held DAFSCs 31630T or 31650T, and the other fourth was comprised of 31670T personnel.
- IX. VERIFICATION AND CHECKOUT OF EQUIPMENT (VACE) PERSONNEL (GRP019). These personnel were responsible for maintaining the electronic equipment utilized by 316X0T personnel. Ninety-seven percent of these incumbents held DAFSC 316X2T, and spent 67 percent of their job time repairing, servicing, and performing periodic checks on missile electronic equipment. Typical tasks unique to this cluster include: repairing AN/GSM-133 checkout sequence programming sets; performing composite self tests on AN/GSM-133 and AN/GSM-211 (V) equipment; and performing self tests on A/E 37A-5 printer sets. It was noted that 82 percent of these respondents felt their training was being utilized, but only 36 percent planned to reenlist. The reenlistment percentage could become a critical factor because the training school has cut the number of 316X2T graduates

from 30 to 12 for 1979. Also, these incumbents performed an average of 149 tasks, the highest for all clusters and independent job types. The average AFMS was 54 months and 59 percent of these incumbents were in their first enlistment. Sixty percent held DAFSC 31652T, and 20 percent held DAFSC 31672T.

In this cluster, three distinct job types were identified, which include: (1) FB-111 VACE Mechanics; (2) B-52 VACE Mechanics; and (3) VACE NCOICs. Tables VII, VIII, and IX in Appendix A reveal various duty and background data about these three job types.

FB-111 VACE Mechanics maintained the electronic equipment used by DAFSC 316X0T personnel working on the FB-111 SRAM system. These incumbents spent approximately 90 percent of their job time maintaining missile electronic equipment or performing general shop maintenance. Common tasks include: performing self tests on FB-111 tape readers; performing corrosion control of electronic equipment; and performing fault isolation of 12A6659-500 tape readers. All incumbents in this group held DAFSCS 31632T or 31652T, and Table IX (Appendix A) reveals that only 20 percent of these incumbents plan to reenlist. Eighty-nine percent of the B-52 VACE Mechanics held DAFSCS 31632T or 31652T. Table IX reveals that 87 percent felt their training was being utilized at least fairly well. Generally, these incumbents perform the same tasks as the FB-111 VACE mechanics, except for the maintenance of equipment unique to either the FB-111 or B-52 aircraft. Common tasks include: performing fault isolation on AN/AJQ digital data inserter sets; calibrating timing controls on AN/AWM-41 electrical circuits test sets; and performing fault isolation on AN/GSM-133 equipment.

VACE NCOICs were found at both FB-111 and B-52 bases. These individuals were primarily responsible for directing VACE shop activities. Common tasks were both supervisory and technical in nature, such as scheduling leaves or passes, supervising DAFSC 31632T personnel, and calibrating AN/GSM-133 test adapter sets. It was noted these incumbents performed an average of 198 tasks, which was the highest of all job types within other clusters or the independent job types. Also, 53 percent of these respondents held DAFSC 31672T.

Structure Summary

Based on the supervisory and technical tasks performed, DAFSC 316X0T personnel were broken down into three main clusters, these being Missile Maintenance Supervisors, Flightline Maintenance Personnel, and Booster Section Personnel. DAFSC 316X0T personnel also made up the five independent job types, which were the Quality Control Personnel, Maintenance Analysis Personnel, Munitions Control Personnel, Test and Evaluation Personnel, and Consolidated Tool Room Members. Generally, DAFSC 316X0T personnel were found to be primarily responsible for various aspects of SRAM maintenance. The DAFSC 316X2T

personnel were almost entirely found in the Verification and Checkout of Equipment (VACE) cluster. These incumbents were responsible for maintaining the electronic equipment used by the 316X0T personnel. Overall, the present structure of two separate specialties was supported by the data since AFSC-specific jobs clustered into separate job types. This separation of jobs extend through the 7-skill level; only in the Test and Evaluation job group and Missile Maintenance Supervisor job groups was there any substantial mixing of AFSCs. This is very consistent with the current separate structure which merges only at the 9-skill level.

TABLE 4

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB CLUSTERS AND INDEPENDENT JOB TYPES

	MISSILE MAINTENANCE SUPERVISORS	QUALITY CONTROL PERSONNEL	MAINTENANCE ANALYSIS PERSONNEL	MUNITIONS CONTROL PERSONNEL	TEST AND EVALUATION PERSONNEL	FLIGHTLINE MAINTENANCE PERSONNEL	CONSOLIDATED TOOL ROOM HENRERS	BOOSTER SECTION PERSONNEL	VACE
OUTIES	(N=137)	(N=12)	(N=26)	(N=44)	(N=6)	(N=307)	(N≈5)	(N=159)	(N=71)
ORGANIZING AND PLANNING	11	5	6	20	91	1	,	-	2
DIRECTING AND IMPLEMENTING	56	13	21	30	29	2	3	3	7
EVALUATING	18	42	3	2	22	4	2	2	3
TRAINING	80	9	2	1	*	2	*	1	2
PERFORMING MAINTENANCE MANAGEMENT									
AND ADMINISTRATIVE FUNCTIONS	18	22	43	39	22	*	37	00	œ
OPERATING OR MAINTAINING AGM-69A									
BOOSTER SECTION	00	2	÷¢.	*	40	11	*	15	3
PERFORMING FLIGHTLINE ORGANIZATIONAL									
MAINTENANCE	1	1	12	+<	*	39	*	2	*
PERFORMING OPERATIONAL CHECKS, SELF									
TESTS, AND PERIODIC INSPECTIONS OF									
AGM-69A ELECTRONIC EQUIPMENT	3	-¦¢	-1¢	40	*	80	9	3	15
PERFORMING FAULT ISOLATION OF AGM-69A									
ELECTRONIC COMPONENTS OR EQUIPMENT	9	*	-jt	*	4¢	1	40	12	14
CALIBRATING AND ADJUSTING AGM-69A									
ELECTRONIC EQUIPMENT	S	-tc	*	-}t	*	*	ή¢	*	16
REPAIRING OR SERVICING MISSILE									
ELECTRONIC EQUIPMENT OR COMPONENTS	s	-	*	*	*	7	16	==	22
PERFORMING GENERAL SHOP MAINTENANCE	œ	S	80	9	=	50	30	15	12

* INDICATES LESS THAN ONE PERCENT

TABLE S

RACKGROUND INFORMATION BY CLUSTERS AND INDEPENDENT JOB TYPES

	MISSILE HAINTENANCE SUPERVISORS	QUALITY CONTROL PERSONNEL	MAINTENANCE ANALYSIS PERSONNEL	MUNITIONS CONTROL PERSONNEL	TEST AND EVALUATION PERSONNEL	FLIGHTLINE HAINTENANCE PERSONNEL	CONSOLIDATED TOOL ROOM MEMBERS	BOOSTER SECTION PERSONNEL	VACE
AVERAGE NUMBER OF TASKS PEKFORMED	80	32	54	18	19	57	34	129	149
AVERAGE PAY GRADE	6.5	5.9	4.4	4.5	5.0	3.9	3.4	3.8	3.9
AVERAGE NUMBER OF PERSONNEL SUPERVISED	E. 4.3	1.	4.	.3	1.	1.1	.2	9.	6.
DAFSC									
31630T	*0	70	747	20	20	101	20%	111	20
31650T	25	88	54%	219	205	73%	208	742	70
31670T	28%	92%	42%	33%	33%	177	20	151	35
31632T	70	20	20	70	70	10	20	20	17%
31652T	1,2	80	20	20	20	20	20	6	709
31672T	2%	20	20	20	%0	20	20	20	20%
31699	28%	70	20	20	17%	20	20	70	20
CEM CODE 31600	*	20	K 0	% 0	1 0	% 0	1 0	5	20
AVERAGE HONTHS IN CAREER LADDER	120	92	90	61	61	37	38	32	17
AVERACE MONTHS TAFMS	201	150	81	84	80	57	7,7	51	95
PERCENT IN FIRST ENLISTMEN	2%	20	727	15%	70	57%	209	179	265

TABLE 6

JOB INTEREST AND RELATED DATA BY CLUSTERS AND INDEPENDENT JOB TYPES

	2	
-		-
4000	?	

	MISSILE HAINTENANCE SUPERVISORS	QUALITY CONTROL PERSONNEL	MAINTENANCE ANALYSIS PERSONNEL	MUNITIONS CONTROL PERSONNEL	TEST AND EVALUATION PERSONNEL	FLIGHTLINE MAINTENANCE PERSONNEL	CONSOLIDATED TOOL ROOM MEMBERS	BOOSTER SECTION PERSONNEL	VACE
FIND MY JOB:									
NO RESPONSE	4	œ	0	2	c	*	c	4	7
NIII I		,				2			
DOLL		0	77	07	33	07	9	77	=
SO-SO	21	œ	œ	10	33	31	50	27	25
INTERESTING	78	84	70	89	34	36	07	1.7	09
IT JOB UTILIZES MY TALENTS:									
NO RESPONSE	2	0	0	1	c	c	c	C	c
NOT AT ALL TO UPPY LITTIE	0	æ	23	36		7.5	9	30	
	63	67	22	87	00	2 5	09	60	172
DATE TO THE PROPERTY OF THE PR	5'	5		9		35	240	66	3/
EACELLERILI TO PERFECILI	,	2	0	6	0		0	2	1
IY JOB UTILIZES MY TRAINING:									
NO RESPONSE	1	0	0	2		o	0	2	0
NOT AT ALL TO VERY LITTLE	28	18	31	70	41	29	80	28	18
	59	57	65	23	75	11	20	99	75
EXCELLENTLY TO PERFECTLY	12	22	4	5	3	16	0	3	. ~
PLAN TO REENLIST:									
NO RESPONSE	2	00	0	4	0	4	0	8	3
ON.	28	80	27	25	16	28	20	32	39
PROBABLY NO	13	00	15	23	17	36	20	30	22
PROBABLY YES	15	18	20	32	20	17	09	16	25
YES	67	85	38	91	11	3.6	3	14	2 =

TABLE 5

BACKGROUND INFORMATION BY CLUSTERS AND INDEPENDENT JOB TYPES

	MISSILE MAINTENANCE SUPERVISORS	QUALITY CONTROL PERSONNEL	MAINTENANCE ANALYSIS PERSONNEL	MUNITIONS CONTROL PERSONNEL	TEST AND EVALUATION PERSONNEL	FLIGHTLINE MAINTENANCE PERSONNEL	CONSOLIDATED TOOL ROOM MEMBERS	BOOSTER SECTION PERSONNEL	VACE
AVERAGE NUMBER OF TASKS PEKFORMED	80	32	24	18	19	57	34	129	149
AVERAGE PAY GRADE	6.5	5.9	4.4	4.5	5.0	3.9	3.4	3.8	3.9
AVERAGE NUMBER OF PERSONNEL SUPERVISED	£.3	.,	4.	e.	1.	1.1	.2	9.	6.
DAFSC									
31630T	40	20	27	20	70	101	207	111	10
31650T	27	88	24%	67%	205	73%	80%	747	6
316707	28%	92%	42%	33%	33%	17%	20	15%	35
31632T	6	20	20	20	70	20	*6	20	172
316527	12	20	10	20	70	20	*0	70	109
31672T	2%	20	70	20	20	20	20	00	20%
31699	28%	20	20	20	17%	5	20	20	20
сен соре 31600	2	20	20	5 0	8	%	1 0	5	10
AVERAGE MONTHS IN CAREER LADDER	120	92	90	61	61	37	38	32	17
AVERAGE MONTHS TAFMS	201	150	81	84	80	57	777	51	95
PERCENT IN FIRST ENLISTMENT	2%	20	45\$	15%	20	27.2	209	179	265

TABLE 6
JOB INTEREST AND RELATED DATA BY CLUSTERS AND INDEPENDENT JOB TYPES (PERCENT RESPONDING)

VACE		4 11 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6		0 21 72 7		0 18 75 7		39 22 25 11
BOOSTER SECTION V PERSONNEL F		22 27 47		39 22 2		78 78 78 78		32 30 19
CONSOLIDATED TOOL ROOM MEMBERS		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0990		800 000 000		0 0 0 0 0 0
FLIGHTLINE MAINTENANCE PERSONNEL		3 31 36		6. 5.2 3.3		0 67 17 16		28 26 17 24
TEST AND EVALUATION PERSONNEL		33 33 34		83 17 0		41 54 3		0 16 17 50
MUNITIONS CONTROL PERSONNEL		2 20 10 68		36 48 9		2 70 23 5		25 23 32 16
MAINTENANCE ANALYSIS PERSONNEL		0 22 8 70		23 77 0		31 65 4		0 27 15 20 38
QUALITY CONTROL PERSONNEL		8 O 8 7		0 8 67 15		0 18 57 25		8 8 18 58
MISSILE MAINTENANCE SUPERVISORS		4 7 21 78		2 18 63 7		1 28 59 12		2 8 13 15 42
	I FIND MY JOB:	NO RESPONSE DULL SO-SO INTERESTING	MY JOB UTILIZES MY TALENTS:	NO RESPONSE NOT AT ALL TO VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENTLY TO PERFECTLY	MY JOB UTILIZES MY TRAINING:	NO RESPONSE NOT AT ALL TO VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENTLY TO PERFECTLY	I PLAN TO REENLIST:	NO RESPONSE NO PROBABLY NO PROBABLY YES YES

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups forms a part of each occupational analysis. The DAFSC analysis helps to identify differences among skill level groups within a specialty as well as differences between specialties. It also aids in the analysis of career ladder documents such as AFR 39-1, Specialty Descriptions and Specialty Training Standards (STS).

The DAFSC analysis of the 316X0T/X2T specialties was broken out into two areas. First, similarities and or differences between the 316X0T and 316X2T specialties were examined. Second, differences between the various skill levels in each specialty were examined.

316X0T and 316X2T Comparison

According to the AFR 39-1 Specialty Descriptions, DAFSC 316X0T personnel maintain the AGM-69A (SRAM) missile system, while DAFSC 316X2T personnel repair and maintain the electronic equipment used by DAFSC 316X0T personnel. Therefore, although both specialties are associated with the same weapon system, each specialty has a distinct and separate responsibility, as was demonstrated in the CAREER LADDER STRUCTURE section.

The 664 DAFSC 316X0T respondents were found to perform primarily general and SRAM maintenance duties, spending 57 percent of their time on aircraft, missile, and general shop maintenance and administrative functions (see Table 7). The 76 DAFSC 316X2T respondents, on the other hand, spend 73 percent of their time on missile electronic equipment and general shop maintenance.

In examining tasks performed by members in each specialty, major differences were noted. Table 8 lists the tasks performed by the highest percentage of 316X0T personnel. As shown, most tasks listed relate to data insertion procedures, or equipment or shop maintenance. Table 9, on the other hand, reveals a large percentage of the 316X2T personnel perform such tasks as repairing and testing AN/GSM-133 and AN/GSM-211(V) equipment. Table 10 lists those tasks which reveal the greatest differences between both ladders in terms of percent members performing tasks. The tasks which tend to separate the two ladders seem to be flightline and missile maintenance tasks for the 316X0T personnel and missile electronic equipment maintenance tasks for the 316X2T personnel. Therefore, the two ladders do seem to have distinct and different tasks.

In addition to task differences, equipment differences were also found. As seen in Table 11, the most common equipment utilized by 316X0T respondents were of the general maintenance type, such as soldering irons and torque wrenches. The 316X2T respondents utilized

more of the electrically oriented equipment, such as differential voltmeters and oscilloscopes. A difference in percent members utilizing the most common equipment was also noted. This may indicate that the 316X2T specialty might be more homogeneous, because a much higher percentage of 316X2T respondents used the same types of equipment, while the 316X0T respondents had smaller percentages utilizing many more pieces of equipment.

DAFSC 316X0T Skill Level Comparisons

DAFSC 31630T and 31650T personnel primarily perform technical tasks involving aircraft and general shop maintenance, such as maintaining work areas and operating nonpowered aerospace ground equipment. Less than 15 percent of the total job time of 5-skill level incumbents is spent on supervisory and training duties. Common tasks performed, as well as other information about DAFSC 316X0T groups, can be found in Tables 12 through 16.

Table 13 reflects a listing of tasks common to 31670T personnel. Most of the tasks listed are supervisory in nature, such as determining work priorities and preparing or indorsing Airman Performance Reports (APRs). Technical tasks performed by 7-skill level incumbents are administrative and evaluative in nature, such as drafting correspondence and making technical inspections.

Table 14 lists those tasks which provide the greatest differences between the 5- and 7-skill level incumbents on the basis of percent members performing tasks. The greatest differences appear to be the higher percentage of 7-skill level incumbents performing supervisory tasks, and the greater percentage of 5-skill level incumbents performing flightline and general maintenance tasks.

DAFSC 31699 and CEM Code 31600 personnel perform tasks that are indicative of managers. Table 15 reveals a majority of 31699 and CEM Code 31600 personnel perform such tasks as interpreting policies for subordinates; determining requirements for equipment and space; and compiling information for reports or staff studies. It was noted that only five percent of the job time of these skill level incumbents was spent on technical or maintenance type tasks.

Table 16 lists tasks which best exemplify the differences between 7- and 9-skill level incumbents. A large percentage of 9-skill level incumbents perform managerial tasks, such as conducting staff meetings, establishing organizational policies, etc., while a much smaller percentage of the 7-skill level incumbents perform the same tasks. A greater percentage of 7-skill level incumbents perform first line supervisory and administrative tasks, such as supervising 31630T personnel and making entries on maintenance data collection records.

DAFSC 316X2T Skill Level Comparisons

DAFSC 31632T and 31652T personnel were found to perform mainly maintenance tasks involving missile electronic equipment and shop up-keep. As seen in Table 17, 31652T personnel perform such tasks as performing fault isolation and calibrating tape readers on AN/GSM-133 equipment. Less than 15 percent of the 5-skill level incumbents' job time was spent on supervisory tasks.

Table 18 presents the tasks performed by the greatest percentages of 31672T personnel. The 7-skill level incumbents seem to perform both supervisory and technical tasks. Some examples would include indorsing Airman Performance Reports (APRs) and repairing AN/GSM-133 equipment. It is important to note their job is still technical in nature, since 7-skill level incumbents spend less than 40 percent of their job time on supervisory related tasks.

Table 19 lists the tasks which reveal the greatest differences between the 5- and 7-skill level incumbents. Supervisory tasks, such as determining section training requirements, seem to be performed by a much larger percentage of 7-skill level incumbents. Maintenance tasks, such as performing self tests and repairing AN/AWM-39A missile simulators, seem to be more indicative of 5-skill level incumbents.

As stated in the <u>DAFSC 316X0T Skill Level Comparison</u> section, 9-skill level incumbents performed tasks indicative of managers (see Table 15). Some of these tasks include planning or preparing briefings and evaluating safety or security programs.

In comparing the 31672T incumbents and 9-skill level incumbents, Table 20 provides tasks which best differentiate between the two skill level groups. A much greater percentage of 316X2T 7-skill level incumbents performed technical and maintenance tasks, such as adjusting snubbers and performing fault isolation on A/E 37A-5 printer sets, while a much greater percentage of 31699 and CEM Code 31600 personnel spent time performing managerial tasks, for example supervising personnel other than AFS 316XX.

Summary

Although 316X0T and 316X2T are both associated with the same weapon system (SRAM), each specialty was found to have distinct and different responsibilities. The 316X0T personnel performed flightline and general maintenance duties and tasks, while the 316X2T personnel performed missile electronic equipment and general maintenance duties and tasks. The differences in the two specialties was also borne out by the types of equipment each specialty utilized. The types and amount of equipment used may have indicated that the 316X2T specialty was more homogeneous than the 316X0T specialty.

In the analysis of 316X0T and 316X2T skill level groups, maintenance and technical tasks were indicative of 3- and 5-skill level incumbents, technical and first line supervisory tasks were associated with 7-skill level incumbents, and managerial tasks were linked to 9-skill level incumbents. The typical pattern of increasing supervisory and decreasing maintenance tasks with increasing skill level groups was noted for both specialties.

TABLE 7

PERCENT TIME SPENT ON TASKS IN DUTIES BY DAFSC GROUPS

DAFSC

Da	DUTIES	DAFSC 316X0T (N=664)	DAFSC 31630T (N=53)	DAFSC 31650T (N=404)	DAFSC 31670T (N=207)	DAFSC 316X2T (N=76)	DAFSC 31632T (N=11)	DAFSC 31652T (N=44)	DAFSC 31672T (N=21)	31699 AND CEM CODE 31600 (N=25)
A	ORGANIZING AND PLANNING	2	*	3	11	6	44	2	7	18
В	DIRECTING AND IMPLEMENTING	10	2	9	19	9	-	3	14	31
C	EVALUATING	9	1	3	12	2	2	3	10	23
0	TRAINING	3	45	2	9	3	-/<	2	7	7
ш	PERFORMING MAINTENANCE MANAGEMENT AND									
	ADMINISTRATIVE FUNCTIONS	16	8	14	20	8	2	8	10	17
ja,	OPERATING AND MAINTAINING AGM-69A									
	BOOSTER SECTION	11	19	12	9	3	7	3	2	4
9	PERFORMING FLIGHTLINE ORGANIZATIONAL									
	MAINTENANCE	19	32	23	6	-;c	40	⊰¢	+)¢	4
H	PERFORMING OPERATIONAL CHECKS, SELF									
	TESTS, AND PERIODIC INSPECTIONS OF									
	AGM-69A	5	5	9	2	14	17	15	10	*
-	PERFORMING FAULT ISOLATION OF AGM-69A									
	ELECTRONIC COMPONENTS OR EQUIPMENT	7	2	2	2	13	15	13	10	2
5	CALIBRATING AND ADJUSTING AGM-69A									
	ELECTRONIC EQUIPMENT	*	40	40	-}¢	14	17	15	10	45
×	REPAIRING OR SERVICING MISSILE									
	ELECTRONIC EQUIPMENT OR COMPONENTS	9	8	8	3	20	24	22	12	44
L	PERFORMING GENERAL SHOP MAINTENANCE	16	18	18	10	12	14	13	∞	3

* INDICATES LESS THAN ONE PERCENT

TABLE 8

TASKS PERFORMED BY THE GREATEST PERCENTAGES OF DAFSC 316XOT RESPONDENTS

TASKS	PERCENT MEMBERS PERFORMING (N=664)
	75
SWEEP, MOP, OR BUFF FLOORS	75
INSPECT MAINTENANCE VEHICLES	56
INITIATE OR MAKE ENTRIES ON MAINTENANCE DATA COLLECTION RECORD	
FORMS	56
PAINT WALLS OR FLOORS	55
READ OR INTERPRET SCHEMATIC DIAGRAMS	54
REMOVE SNOW, ICE, OR DIRT FROM WORK SITES	52
PERFORM EQUIPMENT INSPECTIONS	51
TAG SERVICEABLE OR UNSERVICEABLE EQUIPMENT	51
IDENTIFY SAFETY HAZARDS FOR PERSONNEL OR EQUIPMENT	51
LOCATE INFORMATION IN TECHNICAL OR SUPPLY PUBLICATIONS	50
OPERATE NONPOWERED AEROSPACE GROUND EQUIPMENT (AGE)	50
PAINT TOOLS OR EQUIPMENT	49
PERFORM FIRT SCORING DATA RETRIEVAL WITH PRINTER	49
PERFORM MISSION DATA INSERTION PROCEDURES	48
PERFORM OPERATIONAL DATA INSERTION PROCEDURES	48

TABLE 9

TASKS PERFORMED BY THE GREATEST PERCENTAGES OF DAFSC 316X2T RESPONDENTS

TASKS	PERCENT MEMBERS PERFORMING (N=76)
REPAIR OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING SETS BY	
REPLACEMENT OF COMPONENTS	93
PERFORM SELF TESTS OF AN/GSM-211(V) TEST ADAPTER SETS	92
READ OR INTERPRET SCHEMATIC DIAGRAMS	92
PERFORM COMPOSITE SELF TESTS OF AN/GSM-133 AND AN/GSM-211(V)	91
PERFORM SELF TESTS OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING SETS	91
CALIBRATE VOLTAGE ANALOG DIGITAL CONVERTERS ON AN/GSM-133 CHECKOUT	
SEQUENCE	91
REPAIR AN/GSM-211(V) TEST ADAPTER SETS BY REPLACEMENT OF COMPONENTS CALIBRATE TAPE READERS ON AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING	91
SETS	91
CALIBRATE PRIMARY OR SECONDARY COUNTERS IN AN/GSM-133 CHECKOUT	
SEQUENCE PROGRAMMING SETS	91
CALIBRATE PS2 OR A104 CROWBARS OF AN/GSM-211(V) TEST ADAPTER SETS	91
PERFORM PERIODIC INSPECTIONS OF AN/GSM-133 CHECKOUT SEQUENCE	
PROGRAMMING SETS .	89
PERFORM SELF TESTS OF A/E 37A-5 PRINTER SETS	89
CALIBRATE POWER SUPPLIES IN AN/GSM-211(V) TEST ADAPTER SETS	89
CALIBRATE POWER SUPPLIES ON AN/GSM-133 CHECKOUT SEQUENCE	
PROGRAMMING SETS	89
REMOVE OR REPLACE PRINTED CIRCUIT CARD ASSEMBLIES	88

TABLE 10

TASKS DISTINGUISHING DAFSC 316X0T AND DAFSC 316X2T PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 316X0T (N=664)	DAFSC 316X2T (N=76)	DIFFERENCE
PERFORM FIRT SCORING DATA RETRIEVAL WITH PRINTER	49	*	+49
PERFORM MISSION DATA INSERTION PROCEDURES	48	*	+48
REMOVE OR INSTALL CARRIER AIRCRAFT EQUIPMENT	48	*	+48
PERFORM PRE-OPERATIONAL CHECKS OF AGM-69A SYSTEMS	48	*	+48
PERFORM OPERATIONAL DATA INSERTION PROCEDURES PERFORM CARRIER AIRCRAFT EQUIPMENT CHECKOUT TEST	48	1	+47
PROCEDURES	48	1	+47
PERFORM PHYSICAL INSPECTION OF AIRCRAFT	45	0	+45
PERFORM FAULT ISOLATION OF AGM-69A SYSTEMS	47	3	+44
REPAIR OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING SETS BY REPLACEMENT OF COMPONENTS CALIBRATE PRIMARY OR SECONDARY COUNTERS IN AN/GSM-133	*	93	-93
CHECKOUT SEQUENCE PROGRAMMING SETS CALIBRATE TAPE READERS ON AN/GSM-133 CHECKOUT SEQUENCE	*	90	-90
PROGRAMMING SETS CALIBRATE PS2 OR A104 CROWBARS ON AN/GSM-211(V) TEST ADAPTER SETS	*	90	-90 -90
CALIBRATE VOLTAGE ANALOG/DIGITAL CONVERTERS ON AN/GSM-133 CHECKOUT SEQUENCE	*	90	-90
REPAIR AN/GSM-211(V) TEST ADAPTER SETS BY REPLACEMENT OF COMPONENTS CALIBRATE POWER SUPPLIES IN AN/GSM-211(V) TEST ADAPTER	*	90	-90
SETS	*	89	-89

^{*} INDICATES LESS THAN ONE PERCENT

TABLE 11
EQUIPMENT USED BY DAFSC 316X0T AND 316X2T PERSONNEL

EQUIPMENT	DAFSC 316X0T (N=664)	DAFSC 316X2T (N=76)
TORQUE WRENCHES	75	96
SOLDERING IRONS	64	96
NITROGEN CYLINDERS	62	63
MULTIMETERS	55	94
CRIMPING TOOLS	54	95
TORQUE SCREWDRIVERS	49	41
EXPLOSIVE CIRCUITRY TESTS SETS	45	6
PIN STRAIGHTENERS	39	78
ELECTRIC DRILLS	35	78
DC VOLT STANDARDS	12	97
BREAKOUT BOXES	21	96
DIFFERENTIAL VOLTMETERS	14	96
ELECTRONIC COUNTERS	12	96
OSCILLOSCOPES	12	96
PULSE GENERATORS	3	96
DISTORTION ANALYZERS	0	95
REGULATED POWER SUPPLIES	15	95

TABLE 12

COMMON TASKS PERFORMED BY DAFSC 31650T PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=404)
SWEEP, MOP, OR BUFF FLOORS	88
PAINT WALLS OR FLOORS	66
INSPECT MAINTENANCE VEHICLES	63
PAINT TOOLS OR EQUIPMENT	62
MAINTAIN LAWNS, GROUNDS, OR WALKS	60
REMOVE SNOW, ICE, OR DIRT FROM WORK SITES	60
OPERATE NONPOWERED AEROSPACE GROUND EQUIPMENT (AGE)	58
PERFORM FIRT SCORING DATA RETRIEVAL WITH PRINTERS	56
PERFORM OPERATIONAL DATA INSERTION PROCEDURES	56
REMOVE OR INSTALL CARRIER AIRCRAFT EQUIPMENT	56

TABLE 13 COMMON TASKS PERFORMED BY DAFSC 31670T PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=207)
PREPARE OR INDORSE AIRMAN PERFORMANCE REPORTS (APRs)	80
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	72
DETERMINE WORK PRIORITIES	72
EVALUATE PERSONNEL DUTY PERFORMANCE	69
DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	65
INITIATE OR MAKE ENTRIES ON MAINTENANCE DATA COLLECTION RECORD FORMS	65
COORDINATE WORK BETWEEN DUTY SECTIONS	64
SUPERVISE MISSILE SYSTEMS ANALYST SPECIALISTS (AFS 31650T)	64
MAINTAIN CONSOLIDATED TRAINING RECORD FORMS (AF FORM 623)	62
PLAN OR SCHEDULE WORK ASSIGNMENTS	61

TABLE 14

TASKS WHICH BEST DISTINGUISH DAFSC 31650T AND DAFSC 31670T PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 31650T	DAFSC 31670T	DIFFERENCE
PREPARE OR INDORSE AIRMAN PERFORMANCE REPORTS (APRs) COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED	22	80	-58
PROBLEMS	19	72	-53
EVALUATE PERSONNEL DUTY PERFORMANCE	16	68	-52
DETERMINE WORK PRIORITIES	21	72	-51
PERFORM SUPERVISORY INSPECTIONS	10	56	-46
INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR			
SUBORDINATES	15	61	-46
COORDINATE WORK BETWEEN DUTY SECTIONS	20	64	-44
SWEEP, MOP, OR BUFF FLOORS	88	50	+38
MAINTAIN LAWNS, GROUNDS, OR WALKS	60	22	+38
PAINT TOOLS OR EQUIPMENT	62	27	+35
STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS			
ON EQUIPMENT	53	22	+31
PAINT WALLS OR FLOORS	66	35	+31
REMOVE SNOW, ICE, OR DIRT FROM WORK SITES	60	32	+28
PERFORM MISSILE SIMULATOR CHECKS	55	28	+27

TABLE 15

COMMON TASKS PERFORMED BY DAFSC 31699 AND CEM CCDE 31600 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=25)
DRAFT CORRESPONDENCE	96
COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	92
COORDINATE WORK BETWEEN DUTY SECTIONS	88
PLAN, PREPARE, OR PRESENT BRIEFINGS	88
INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	84
PERFORM SUPERVISORY INSPECTIONS	84
PREPARE OR INDORSE AIRMAN PERFORMANCE REPORTS (APRs)	84
DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	84
EVALUATE WORK SCHEDULES	80
EVALUATE SAFETY OR SECURITY PROGRAMS	80

TABLE 16

TASKS DISTINGUISHING DAFSC 31670T AND DAFSC 31699/CEM CODE 31600 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 31670T	DAFSC 31699 AND CEM CODE 31600	DIFFERENCE
CONDUCT STAFF MEETINGS	14	72	-58
ESTABLISH ORGANIZATIONAL POLICIES OR OFFICE			
INSTRUCTIONS (OI)	18	76	-58
EVALUATE SAFETY AND SECURITY PROGRAMS	24	80	-56
SUPERVISE PERSONNEL OTHER THAN AFS 316XX	20	72	-52
EVALUATE ALERT OR EMERGENCY PROCEDURES	24	76	-52
PLAN, PREPARE, OR PRESENT BRIEFINGS	36	88	-52
COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	44	92	-48
SWEEP, MOP, OR BUFF FLOORS	50	*	+50
IDENTIFY SAFETY HAZARDS FOR PERSONNEL OR EQUIPMENT	54	8	+46
READ OR INTERPRET SCHEMATIC DIAGRAMS	56	12	+44
INITIATE OR MAKE ENTRIES ON MAINTENANCE DATA COLLECTION			
RECORD FORMS	65	24	+41
SUPERVISE MISSILE SYSTEMS ANALYST SPECIALISTS			
(AFSC 31650T)	64	24	+40
READ OR INTERPRET WIRING DIAGRAMS	45	8	+37
PERFORM FAULT ISOLATION OF AGM-69A SYSTEM	36	*	+36
SUPERVISE APPRENTICE MISSILE SYSTEM ANALYST SPECIALISTS			
(AFSC 31630T)	48	12	+36

TABLE 17

MOST COMMON TASKS PERFORMED BY DAFSC 31652T PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=44)
SWEEP, MOP, OR BUFF FLOORS	98
CALIBRATE TAPE READERS ON AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING	
SETS	98
CALIBRATE PS2 OR A104 CROWBARS OF AN/GSM-211(V) TEST ADAPTER SETS	98
REPAIR OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING SETS BY REPLACEMENT	
OF COMPONENTS	98
PERFORMING SELF TESTS OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING SETS	95
PERFORM SELF TESTS OF AN/GSM-211(V) TEST ADAPTER SETS	95
PERFORM PERIODIC INSPECTIONS OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING	
SETS	95
CALIBRATE PRIMARY OR SECONDARY COUNTERS IN AN/GSM-133 SEQUENCE	,,
PROGRAMMING SETS	95
PERFORM COMPOSITE SELF TESTS OF AN/GSM-133 AND AN/GSM-211(V)	93
CALIBRATE VOLTAGE ANALOG/DIGITAL CONVERTERS ON AN/GSM-133 CHECKOUT	33
	0.2
SEQUENCE	93

TABLE 18

MOST COMMON TASKS PERFORMED BY DAFSC 31672T PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=21)
PREPARE OR INDORSE AIRMAN PERFORMANCE REPORTS (APRs)	86
DIRECT VERIFICATION AND CHECKOUT EQUIPMENT SHOP (VACE)	86
DEVELOP OR IMPROVE WORK METHODS AND PROCEDURES	86
READ OR INTERPRET SCHEMATIC DIAGRAMS	86
PLAN OR SCHEDULE WORK ASSIGNMENTS	86
DETERMINE WORK PRIORITIES	86
REPAIR OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING SETS BY REPLACEMENT	
OF COMPONENTS	86
REPAIR AN/GSM-211(V) TEST ADAPTER SETS BY REPLACEMENT OF COMPONENTS	86
CALIBRATE VOLTAGE ANALOG/DIGITAL CONVERTERS ON AN/GSM-133 CHECKOUT	
SEQUENCE	86
PERFORM SELF TESTS OF AN/GSM-211(V) TEST ADAPTER SETS	86

TABLE 19

TASKS DISTINGUISHING DAFSC 31652T AND DAFSC 31672T PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 31652T	DAFSC 31672T	DIFFERENCE
PREPARE OR INDORSE AIRMAN PERFORMANCE REPORTS (APRs)	20	85	-65
DRAFT CORRESPONDENCE	7	72	-65
ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	5	67	-62
DETERMINE SECTION TRAINING ASSIGNMENTS	18	76	-58
DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT,			
OR SUPPLIES	14	72	-58
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	32	86	-54
PERFORM SUPERVISORY INSPECTIONS	14	67	- 53
PAINT TOOLS OR EQUIPMENT	84	38	+46
SWEEP, MOP, OR BUFF FLOORS	98	52	+46
MAINTAIN LAWNS, GROUNDS, OR WALKS	77	33	+44
REPAIR AN/AWM-39A MISSILE SIMULATORS BY REPLACEMENT OF			
COMPONENTS	64	24	+40
PERFORM SELF TESTS OF AN/AWM-39A MISSILE SIMULATORS	66	29	+37
PERFORM FAULT ISOLATION OF AN/AWM-39A MISSILE SIMULATORS	59	24	+35
PAINT WALLS OR FLOORS	77	43	+34
PERFORM FAULT ISOLATION OF CONTROL AND DISPLAY PANELS	48	14	+34

TABLE 20

TASKS DISTINGUISHING DAFSC 31672T AND DAFSC 31699/CEM CODE 31600 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 31672T	DAFSC 31699 AND CEM CODE 31600	DIFFERENCE
PERFORM SELF TESTS OF AN/GSM-211(V) TEST ADAPTER SETS	86	*	+86
PERFORM FAULT ISOLATION OF A/E 37A-5 PRINTER SETS CALIBRATE PRIMARY OR SECONDARY COUNTERS IN AN/GSM-133	86	*	+86
CHECKOUT SEQUENCE PROGRAMMING SETS	86	*	+86
ADJUST SNUBBERS PERFORM COMPOSITE SELF TESTS ON AN/GSM-133 AND	86	*	+86
AN/GSM-211(V)	86	4	+82
PERFORM OPERATIONAL CHECKS OF MISSILE TEST STANDS	86	4	+82
SUPERVISE PERSONNEL OTHER THAN AFS 316XX	5	72	-67
SUPERVISE MISSILE SYSTEMS ANALYST TECHNICIANS (AFSC 316707	* (1	64	-64
CONDUCT STAFF MEETINGS	19	73	-54
EVALUATE ALERT OR EMERGENCY PROCEDURES	24	76	-52

^{*} INDICATES LESS THAN ONE PERCENT

COMPARISON OF SURVEY DATA TO AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data for both the 316X0T and 316X2T career ladders were compared to the AFR 39-1 Specialty Descriptions, dated 31 October 1977. The descriptions are intended to give a broad overview of the duties and tasks required to be performed by the various skill level personnel.

Overall, the 5-, 7-, and 9-skill level descriptions were found to provide a clear, comprehensive overview of the major duties and tasks performed by 316X2T skill level incumbents. The AFR 39-1 Specialty Description for the 316X0T skill level groups was also a good overview of the career ladder incumbents; however, the primary tasks performed by groups of Test and Evaluation Personnel and the Tool Room Members (identified in the CAREER LADDER STRUCTURE section) were not specifically covered. Tool room tasks, such as issuing tools or equipment and receiving tools or equipment were not mentioned. Evaluation and maintenance tasks involving the Air Launch Cruise Missile were also not covered. These tasks should be reviewed for possible inclusion in the next AFR 39-1 Specialty Description revision.

ANALYSIS OF EXPERIENCE (TAFMS) GROUPS

316X0T Trends

Incumbents in the first through fourth enlistment groups perform primarily a technical job, with flightline and gereral maintenance duties tending to predominate. A steady increase of job time spent on supervisory duties occurs across these groups, although these duties generally take up less than 50 percent of their job time (see Table 21).

A shift in emphasis seems to occur after the fourth enlistment. Over 60 percent of the fifth and sixth enlistment incumbents' job time was spent on supervisory duties. Less than 15 percent of the job time was now being spent on flightline and general maintenance.

First term incumbents were also examined on the basis of tasks performed and equipment utilized. Table 22 reveals the tasks most common to the 316XOT first term respondents. Most of these tasks involved either general or flightline maintenance areas, such as cleaning floors or removing carrier aircraft equipment. The most common pieces of equipment utilized by 316XOT first term respondents, such as soldering irons and nitrogen cylinders, are listed in Table 23. It was noted the 316XOT specialty may be fairly heterogeneous based on the diversity of tasks performed and equipment used.

316X2T Trends

Eighty percent of the 316X2T incumbents were in the first and second enlistment groups. Table 24 reveals that first enlistment incumbents spend only six percent of their time on supervisory tasks, while the remainder was spent on administrative, electronic equipment maintenance, and general maintenance tasks. In the second enlistment group, incumbents spend 21 percent of their time on supervisory tasks, and 79 percent of their time on administrative, electronic equipment maintenance, and general maintenance tasks.

Since the sample sizes of the third, fourth, and fifth enlistment groups were so small, no meaningful discussion or analysis of the groups can be made. Also, for the same reason, the data presented in Table 24 for the third, fourth, and fifth enlistment groups should be used cautiously.

The first-term respondents were also examined on the basis of tasks performed and equipment used. Table 25 indicates more than 90 percent of first enlistment personnel spent time maintaining missile electronic equipment, such as calibrating AN/GSM-133 checkout sequence programming sets, and isolating faults on A/E 37A-5 printer sets. It was also noted that more than 90 percent of these respondents use electrically oriented equipment while performing their jobs, such as

DC volt standards and ratio transformers (see Table 26). The tasks performed and equipment used may indicate a fairly homogeneous career field.

Job Satisfation Data

Job interest, perceived utilization of talents and training, and reenlistment intentions for 316X0T/X2T first-term respondents are presented in Table 27, along with comparative sample data taken from all mission equipment maintenance career ladders surveyed in 1978. (These sample career ladders included ones in the following fields: 30XXX, 31XXX, 32XXX, 34XXX, 36XXX, 40XXX, 42XXX, 43XXX, 44XXX, and 46XXX.) When compared with the mission equipment maintenance sample group, a lower percentage of 316X0T first-term respondents find their job as interesting (48 percent) or believe their job utilizes their talents (54 percent) than the 1978 sample. Their reenlistment intentions were also slightly less than the average for the 1978 sample. However, a noticeably larger percentage of 316X0T first-term respondents (94 percent) felt their job utilized their training than the comparative sample.

Table 27 also presents background information for 316X2T first-term personnel. Approximately the same percentage of 316X2T respondents found their job as interesting as the 1978 sample. However, a noticeably larger percentage of 316X2T respondents found their job utilized their talents (73 percent) or utilized their training (83 percent) than the comparative sample. It is interesting to note that although a larger percentage of 316X2T respondents felt their job utilized their talents or their training, a much lower percentage (19 percent) planned to reenlist than the 1978 sample.

Overall, a larger percentage of 316X0T first-term respondents found their training utilized their training, while a lower percentage found their job interesting or planned to reenlist than the 1978 comparative sample. A larger percentage of 316X2T first-term respondents found their job utilized their talents and training, while a much lower percentage planned to reenlist than the 1978 mission equipment maintenance sample. These data suggest that there may be some serious problems in career motivation in these specialties, and particularly in the 316X2T first enlistment group.

TABLE 21

PERCENTAGE TIME SPENT ON DUTIES BY 316X0T AFMS GROUPS

				MONTHS AFMS	AFMS		
		1-48	96-65	97-144	145-192	193-240	241+
DU	DUTIES	(N=301)	(N≈182)	(N=72)	(N=59)	(N=40)	(N=8)
A	ORGANIZING AND PLANNING	2	9	&	10	16	15
B	DIRECTING AND IMPLEMENTING	3	13	16	18	22	25
U	EVALUATING	2	9	6	11	17	19
Q	TRAINING	1	4	9	7	7	9
M	PERFORMING MAINTENANCE MANAGEMENT AND ADMINISTRATIVE						
	FUNCTIONS	11	19	21	17	19	17
(see	OPERATING AND MAINTAINING AGM-69A BOOSTER SECTION	15	00	7	9	2	7
9	PERFORMING FLIGHTLINE ORGANIZATIONAL MAINTENANCE	26	17	13	14	3	7
H	PERFORMING OPERATIONAL CHECKS, SELF TESTS, AND PERIODIC						
	INSPECTIONS OF AGM-69A	9	7	8	3	1	2
I	PERFORMING FAULT ISOLATION OF AGM-69A ELECTRONIC						
	COMPONENTS OR EQUIPMENT	9	3	1	2	2	2
ר	CALIBRATING AND ADJUSTING AGM-69A ELECTRONIC						
	EQUIPMENT	40	40	40	*	40	łc
×	REPAIRING OR SERVICING MISSILE ELECTRONIC EQUIPMENT						
	OR COMPONENTS	8	9	7	7	2	1
7	PERFORMING GENERAL SHOP MAINTENANCE	20	15	12	10	∞	7

* INDICATES LESS THAN ONE PERCENT

TABLE 22

COMMON TASKS PERFORMED BY FIRST-TERM RESPONDENTS IN AFS 316X0T

TASK	PERCENT MEMBERS PERFORMING (N=301)
SWEEP, MOP, OR BUFF FLOORS	92
MAINTAIN LAWN, GROUNDS, OR WALKS	68
REMOVE SNOW, ICE, OR DIRT FROM WORK SITES	67
PAINT WALLS OR FLOORS	67
INSPECT MAINTENANCE VEHICLES	64
PAINT TOOLS OR EQUIPMENT	63
OPERATE NONPOWERED AEROSPACE GROUND EQUIPMENT (AGE)	59
PERFORM PRE-OPERATIONAL CHECKS OF AGM-69A SYSTEM	59
PERFORM OPERATIONAL DATA INSERTION PROCEDURES	59
PERFORM FIRT SCORING DATA RETRIEVAL WITH PRINTER	58
PERFORM CARRIER AIRCRAFT EQUIPMENT CHECKOUT TEST PROCEDURE	58
REMOVE OR INSTALL CARRIER AIRCRAFT EQUIPMENT	58
TAG SERVICEABLE OR UNSERVICEABLE EQUIPMENT	57
STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON	
EQUIPMENT	55
LOAD OR UNLOAD PUNCH TAPES ON TAPE READERS	54
READ OR INTERPRET SCHEMATIC DIAGRAMS	54
TRANSPORT EQUIPMENT USING VEHICLES OTHER THAN FORKLIFTS	52
CLEAN ELECTRONIC TEST EQUIPMENT	51
READ OR INTERPRET WIRING DIAGRAMS	50
PERFORM INERTIAL MEASUREMENT UNIT (IMU) CONFIDENCE	
TEST ON B-52	50
PERFORM EQUIPMENT INSPECTIONS	50
RECEIVE OR TURN IN EQUIPMENT	49
IDENTIFY SAFETY HAZARDS FOR PERSONNEL OR EQUIPMENT	49
INITIATE OR MAKE ENTRIES ON MAINTENANCE DATA	
COLLECTION RECORD FORMS	48
PERFORM ENVIRONMENTAL CONTROL SYSTEMS (ECS) LEAK	
CHECKS	47

TABLE 23

MOST COMMON EQUIPMENT UTILIZED BY FIRST-TERM RESPONDENTS IN AFS 316XOT

	PERCENT MEMBERS
	UTILIZING
EQUIPMENT	(N=301)
TORQUE WRENCHES	87
SOLDERING IRONS	71
NITROGEN CYLINDERS	70
MULTIMETERS	58
CRIMPING TOOLS	58
TORQUE SCREWDRIVERS	57
EXPLOSIVE CIRCUITRY TEST SETS	49
TERMINATION PLUGS	44
PIN STRAIGHTENERS	41
ELECTRIC DRILLS	37
HYDRAULIC PRESSURE INDICATORS	36
FLOWMETERS	35
STOP WATCHES	31

TABLE 24

PERCENTAGE OF TIME SPENT ON DUTIES BY 316X2T AFMS GROUPS (MONTHS AFMS)

		1-48	96-67	97-144	145-192	193-240	241+
	DUTIES	(N=41)	(N=20)	(N=4)	(N=8)	(N=3)	(N=0)
	A ORGANIZING AND PLANNING	1	3	10	00	11	,
	B DIRECTING AND IMPLEMENTING	2	6	14	14	11	•
	C EVALUATING	2	9	10	11	10	,
	D TRAINING	1	3	111	10	7	,
a part	E PERFORMING MAINTENANCE MANAGEMENT AND ADMINISTRATIVE						
	FUNCTIONS	7	6	14	11	16	•
	F OPERATING AND MAINTAINING AGM-69A BOOSTER SECTION	7	3	1	2	3	•
	G PERFORMING FLIGHTLINE ORGANIZATIONAL MAINTENANCE	40	4	4c	*	-}c	1
	H PERFORMING OPERATIONAL CHECKS, SELF TESTS, AND PERIODIC						
	INSPECTIONS OF AGM-69A	16	12	5	6	8	
	I PERFORMING FAULT ISOLATION OF AGM-69A ELECTRONIC						
	COMPONENTS OR EQUIPMENT	14	12	2	6	10	•
	J CALIBRATING AND ADJUSTING AGM-69A ELECTRONIC						
	EQUIPMENT	16	14	9	10	8	1
	K REPAIRING OR SERVICING MISSILE ELECTRONIC EQUIPMENT						
	OR COMPONENTS	23	20	80	10	10	•
	L PERFORMING GENERAL SHOP MAINTENANCE	13	11	16	9	16	

* INDICATES LESS THAN ONE PERCENT

TABLE 25

MOST COMMON TASKS PERFORMED BY FIRST-TERM RESPONDENTS IN AFS 316X2T

TASKS	PERCENT MEMBERS PERFORMING (N=41)
PERFORM SELF TESTS OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING	
SETS	98
PERFORM SELF TESTS OF AN/GSM-211 (V) TEST ADAPTER SETS	98
REPAIR OF AN/GSM-133 CHECKOUT SEQUENCE PROGRAMMING SETS BY	
REPLACEMENT OF COMPONENTS	98
CLEAN ELECTRONIC TEST EQUIPMENT	98
SWEEP, MOP, OR BUFF FLOORS	98
READ OR INTERPRET SCHEMATIC DIAGRAMS	95
PERFORM SELF TESTS OF A/E 37A-5 PRINTER SETS	95
PERFORM FAULT ISOLATION OF A/E 37A-5 PRINTER SETS	95
ADJUST PRINTER ASSEMBLY MOTOR SPEED OR TIMING ON A/E 37A-5	
PRINTER SETS	95
CALIBRATE POWER SUPPLIES ON A/E 37A-5 PRINTER SETS	95
CALIBRATE POWER SUPPLIES ON AN/GSM-133 CHECKOUT SEQUENCE	
PROGRAMMING SETS	95
CALIBRATE P52 OR A104 CROWBARS OF AN/GSM-211(V) TEST ADAPTER SETS	95
CALIBRATE TAPE READERS ON AN/GSM-133 CHECKOUT SEQUENCE	
PROGRAMMING SETS	95
REMOVE OR REPLACE PRINTED CIRCUIT CARD ASSEMBLIES	95
PERFORM COMPOSITE SELF TESTS OF AN/GSM-133 AND AN/GSM-211(V)	93
PERFORM PERIODIC INSPECTIONS OF AN/GSM-133 CHECKOUT SEQUENCE	
PROGRAMMING SETS	93
REPAIR AN/GSM-211(V) TEST ADAPTER SETS BY REPLACEMENT OF	
COMPONENTS	93
CALIBRATE POWER SUPPLIES IN AN/GSM-211(V) TEST ADAPTER SETS	93
CALIBRATE PRIMARY OR SECONDARY COUNTERS IN AN/GSM-133 CHECKOUT	
SEQUENCE PROGRAMMING SETS	93

TABLE 26

MOST COMMON EQUIPMENT UTILIZED BY FIRST-TERM RESPONDENTS IN AFS 316X2T

	PERCENT MEMBERS UTILIZED
EQUIPMENT	(N=41)
BREAKOUT BOXES	100
DC VOLT STANDARDS	100
DIFFERENTIAL VOLTMETERS	100
ELECTRONIC COUNTERS	100
OSCILLOSCOPES	100
PULSE GENERATORS	100
SOLDERING IRONS	100
TORQUE WRENCHES	100
CRIMPING TOOLS	98
DISTORTION ANALYZERS	98
REGULATED POWER SUPPLIES	98
DECADE RESISTORS	95
MULTIMETERS	95
TERMINATION PLUGS	95
ULTRASONIC LEAK DETECTORS	95
AC VOLT STANDARDS	93
RATIO TRANSFORMERS	93

TABLE 27

EXPRESSION OF JOB INTEREST, PERCEIVED UTILIZATION OF TALENTS AND TRAINING, AND REENLISTMENT INTENTIONS OF PERSONNEL WITH 1-48 MONTHS TAFMS

316X2T FIRST-TERM RESPONDENTS (N=41)		54 24 24 24 24 24 24 24 24 24 24 24 24 24		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		* 17 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		5% 76% 19%	
1978 COMPARATIVE SAMPLE MISSION EQUIPMENT MAINTENANCE (N=5,881)		3% 18% 19% 60%		6.13% 56.74% 56.74%		6.29 1 738 88 88		3% 61% 36%	
316X0T FIRST-TERM RESPONDENTS (N=301)		338 88 84 84 84 84 84 84 84 84 84 84 84 84		*\$\$\$ 202% 202%		* 6% 80% 14%		3% 68% 29%	
	I FIND MY JOB:	NOT REPORTED DULL SO-SO INTERESTING	MY JOB UTILIZES MY TALENTS:	NOT REPORTED NOT AT ALL OR VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENT OR PERFECTLY	MY JOB UTILIZES MY TRAINING:	NOT REPORTED NOT AT ALL OR VERY LITTLE FAIRLY WELL OR VERY WELL EXCELLENTLY OR PERFECTLY	DO YOU PLAN TO REENLIST:	NOT REPORTED NO OR PROBABLY NO YES OR PROBABLY YES	

* INDICATES LESS THAN ONE PERCENT

COMPARISON TO PREVIOUS SURVEY

No previous survey of the 316X0T specialty had been accomplished; however, 316X2T results of this survey were compared to those of Occupational Survey Report, AFPT 90-316-126 dated 15 October 1974. Generally, the findings of both studies were similar, the only difference being a greater breakdown of the 316X2T career ladder structure in the current survey.

The previous survey identified two clusters of 316X2T personnel, these being VACE NCOICs and AGM-69A Electronic Equipment Specialists. The current survey includes the VACE NCOICs group but further breaks down the Specialist group by aircraft, these being the B-52 VACE Specialists and the FB-111 VACE Specialists. Although the Specialist group was broken down into FB-111/B-52 Specialists, it was noted that the tasks performed and the time spent on those tasks had remained relatively the same over the years. It was also noted that the VACE NCOIC groups in both studies performed relatively the same duties and tasks in addition to spending the same amount of job time on these duties and tasks.

Overall, both studies concluded: (1) reenlistment and retention problems could occur with the Specialist group; (2) that all VACE personnel thought their job utilized their training quite well; and (3) that both the VACE NCOICs and VACE Specialists performed the same duties and tasks, which may indicate the career field is very stable.

ANALYSIS OF TASK DIFFICULTY

From a listing of airmen identified for the 316X0T/X2T job survey, 75 incumbents holding a 7-skill level from the Strategic Air Command and the Air Training Command were selected to rate task difficulty. Tasks were rated on a nine-point scale from extremely low to extremely high difficulty, with difficulty defined as the length of time it takes an average incumbent to learn to do the task. Ratings were then adjusted so that tasks of average difficulty have a rating of 5.00.

Interrater reliability (as assessed through components of variance of standardized group means) among the 69 316XOT and 316X2T raters was .95. It must be noted that 57 of the 69 raters were 316XOT personnel, and the task difficulty ratings should be used cautiously because the ratings could be heavily influenced by the high proportion of 316XOT personnel.

Table 28 lists the most difficult tasks performed by 316X0T/X2T personnel. These tasks were primarily related to the maintenance of missile electronic equipment, supervision, or booster section maintenance. Except for five tasks, ten percent or less of these incumbents were performing these tasks. In general, those tasks rated above average in difficulty were those involving the maintenance of the AN/GSM-133 or AN/GSM-211(V) electronic equipment.

Table 29 provides a listing of tasks rated below average in difficulty by 316X0T/X2T personnel. These tasks were primarily general shop tasks, such as sweeping, mopping, or cleaning floors. Except for three tasks, at least one-fifth of the 740 316X0T and 316X2T incumbents performed these tasks rated below average in difficulty. Tasks that were most consistently rated as the easiest were those related to the cleaning and maintenance of 316X0T or 316X2T facilities.

Job Difficulty Index (JDI)

Having computed the task difficulty index for each inventory item, it is possible to also compute the Job Difficulty Index (JDI) for groups identified in the survey analysis. This index provides a relative measure of which jobs, when compared to other jobs identified, were more or less difficult. The JDI is based on an equation using number of tasks performed and the average difficulty per unit time spent. The index ranks jobs on a scale of one for very easy jobs to 25 for very difficult jobs. The indices are then adjusted so that the average job difficulty index is 13.00.

Table 30 provides a listing of the JDIs for the job types, clusters, and independent job types found in the CAREER LADDER STRUCTURE. Of these groups, the Consolidated Tool Room Members had the lowest JDI (5.0). This was appropriate since these personnel perform primarily administrative and general shop tasks, which were rated at average or below average in task difficulty. The JDI for the Munitions

Control Personnel was also low (7.5). However, these people performed mainly supervisory and administrative tasks. The low JDI can partly be explained in the fact that the JDI is effected by the average number of tasks performed. If two groups perform tasks of equal difficulty, the group performing the highest average number of tasks would have a higher JDI. In this case, although Munitions Control Personnel perform some supervisory tasks, the average number of tasks performed is very small, so consequently their JDI would be lower than expected.

The average number of tasks performed could have also played a role in the highest JDI rating. VACE Personnel performed an average of at least 30 more tasks than any other cluster or independent job type, and this fact could partially explain why their JDI of 18.2 was the highest found. VACE NCOICs had the highest JDI (20.3) of all job types, clusters, or independent job types. These respondents performed primarily supervisory and missile electronic equipment maintenance tasks, but also performed an average of 198 tasks, which was at least 50 more than any other group reported.

Booster Section Personnel had a JDI of 16.0 and performed primarily booster maintenance tasks, many of which were rated above average in difficulty. These respondents also reported performing an average of 129 tasks, which was the second highest found among cluster and independent job types. Finally, Missile Maintenance Supervisors performed primarily supervisory tasks and performed an average of 80 tasks. Their JDI was 15.9, which was the third highest found among clusters or independent job types.

TABLE 28

REPRESENTATIVE TASKS RATED ABOVE AVERAGE IN DIFFICULTY
BY 316X0T/X2T PERSONNEL

TASKS	ATDPUTS*	PERCENT MEMBERS PERFORMING (N=740)
CALIBRATE VOLTAGE ANALOG DIGITAL CONVERTERS ON AN/GSM-133		
CHECKOUT SEQUENCE	8.12	9
PERFORM FAULT ISOLATION OF AN/GSM-133 CHECKOUT SEQUENCE		
PROGRAMMING SETS	7.74	10
SUPERVISE CIVILIAN PERSONNEL	7.33	1
REMOVE OR INSTALL GUIDANCE ASSEMBLY BRANCHED WIRE		
HARNESSES	7.27	14
PERFORM FAULT ISOLATION OF AN/GSM-211(V) TEST ADAPTER		
SETS	7.23	10
DEVELOP TESTS	7.15	5
CALIBRATE PRIMARY OR SECONDARY COUNTERS IN AN/GSM-133		
CHECKOUT SEQUENCE PROGRAMMING SETS	7.15	9
CALIBRATE SIMULATOR GROUP OF AN/GSM-211(V) TEST ADAPTER		
SETS	6.95	9
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	6.84	39
PREPARE OR INDORSE AIRMAN PERFORMANCE REPORTS (APRs)	6.83	42
ISOLATE MALFUNCTIONS TO BOOSTER COMPONENTS	6.75	22
REMOVE OR INSTALL PROPULSION SUBSYSTEMS OR ROCKET MOTORS	6.74	11

^{*} ATDPUTS = AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT

TABLE 29

REPRESENTATIVE TASKS RATED BELOW AVERAGE IN DIFFICULTY
BY 316XOT/X2T PERSONNEL

TASKS ATDPUTS* (N=740) SWEEP, MOP, OR BUFF FLOORS 2.05 72 PAINT WALLS OR FLOORS 2.11 52 MAINTAIN LAWNS, GROUNDS, OR WALKS 2.32 45 REMOVE SNOW, ICE, OR DIRT FROM WORK SITES 2.42 50 RESET OVERLOAD SWITCHES 2.45 10 REMOVE OR REPLACE FUSES 2.47 20 PAINT TOOLS OR EQUIPMENT 2.52 48 STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON 2.52 48 EQUIPMENT 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34 REMOVE OR REPLACE INDICATOR LIGHTS 2.95 37			PERCENT MEMBERS PERFORMING
PAINT WALLS OR FLOORS 2.11 52 MAINTAIN LAWNS, GROUNDS, OR WALKS 2.32 45 REMOVE SNOW, ICE, OR DIRT FROM WORK SITES 2.42 50 RESET OVERLOAD SWITCHES 2.45 10 REMOVE OR REPLACE FUSES 2.47 20 PAINT TOOLS OR EQUIPMENT 2.52 48 STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	TASKS	ATDPUTS*	(N=740)
PAINT WALLS OR FLOORS 2.11 52 MAINTAIN LAWNS, GROUNDS, OR WALKS 2.32 45 REMOVE SNOW, ICE, OR DIRT FROM WORK SITES 2.42 50 RESET OVERLOAD SWITCHES 2.45 10 REMOVE OR REPLACE FUSES 2.47 20 PAINT TOOLS OR EQUIPMENT 2.52 48 STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	SWEEP, MOP, OR BUFF FLOORS	2.05	72
REMOVE SNOW, ICE, OR DIRT FROM WORK SITES 2.42 50 RESET OVERLOAD SWITCHES 2.45 10 REMOVE OR REPLACE FUSES 2.47 20 PAINT TOOLS OR EQUIPMENT 2.52 48 STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	PAINT WALLS OR FLOORS	2.11	52
RESET OVERLOAD SWITCHES 2.45 10 REMOVE OR REPLACE FUSES 2.47 20 PAINT TOOLS OR EQUIPMENT 2.52 48 STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	MAINTAIN LAWNS, GROUNDS, OR WALKS	2.32	45
REMOVE OR REPLACE FUSES 2.47 20 PAINT TOOLS OR EQUIPMENT 2.52 48 STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	REMOVE SNOW, ICE, OR DIRT FROM WORK SITES	2.42	50
PAINT TOOLS OR EQUIPMENT 2.52 48 STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON 2.63 41 EQUIPMENT 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	RESET OVERLOAD SWITCHES	2.45	10
STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON EQUIPMENT 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	REMOVE OR REPLACE FUSES	2.47	20
EQUIPMENT 2.63 41 REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	PAINT TOOLS OR EQUIPMENT	2.52	48
REMOVE OR INSTALL CABLE TIES 2.70 29 CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	STENCIL, DECAL, OR PAINT INSTRUCTIONS OR IDENTIFIERS ON		
CLEAN MISSILE SURFACES 2.70 16 REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	EQUIPMENT	2.63	41
REMOVE OR REPLACE PATCH PANELS 2.78 27 REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	REMOVE OR INSTALL CABLE TIES	2.70	29
REMOVE OR REPLACE RECORDER PENS 2.89 7 PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	CLEAN MISSILE SURFACES	2.70	16
PACK OR UNPACK TEST EQUIPMENT 2.94 30 VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	REMOVE OR REPLACE PATCH PANELS	2.78	27
VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE 2.94 34	REMOVE OR REPLACE RECORDER PENS	2.89	7
	PACK OR UNPACK TEST EQUIPMENT	2.94	30
REMOVE OR REPLACE INDICATOR LIGHTS 2.95 37	VERIFY SHORTING CAP INSTALLATION PRIOR TO MAINTENANCE	2.94	34
	REMOVE OR REPLACE INDICATOR LIGHTS	2.95	37

^{*} ATDPUTS = AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT

TABLE 30

JOB DIFFICULTY INDICES FOR CAREER LADDER GROUPS

CLUSTERS/JOB TYPES/INDEPENDENT JOB TYPES	JOB D1FF1CULTY INDEX
MISSILE MAINTENANCE SUPERVISORS (GRP022)	15.9
SRAM SYSTEMS SUPERINTENDENTS (GRP091) NCOICS CONSOLIDATED TOOL ROOM (GRP128) NCOICS MISSILE CHECKOUT SECTION (GRP081) NCOICS MUNITIONS CONTROL (GRP133) NCOICS SRAM ANALYSIS SECTION (GRP160) SRAM MAINTENANCE SUPERINTENDENTS (GRP076)	18.2 13.5 18.5 13.6 15.3
QUALITY CONTROL PERSONNEL (GRP096)	12.1
MAINTENANCE ANALYSIS PERSONNEL (GRP066)	10.3
MUNITIONS CONTROL PERSONNEL (GRP039)	7.5
TEST AND EVALUATION PERSONNEL (GRP064)	10.1
FLIGHTLINE MAINTENANCE PERSONNEL (GRP033)	10.8
B-52 AIRCRAFT CHECKOUT TEAM CHIEFS (GRP099) B-52 AIRCRAFT CHECKOUT MECHANICS (GRP095) FB-111 WEAPONS RELEASE TEAM CHIEFS (GRP281) FB-111 WEAPONS RELEASE TEAM MEMBERS (GRP259)	14.8 9.4 13.7 9.6
CONSOLIDATED TOOL ROOM MEMBERS (GRP065)	5.0
BOOSTER SECTION PERSONNEL (GRP037)	16.0
VACE PERSONNEL (GRP019)	18.2
FB-111 VACE MECHANICS (GRP210) B-52 VACE MECHANICS (GRP314) VACE NCOICS (GRP359)	15.7 18.1 20.3

IMPLICATIONS

The AGM-69A Missile Systems Analyst (316X0T) and AGM-69A Missile Electronic Equipment (316X2T) specialties appear to be very distinct and separate career ladders. When the similarity of jobs was tested in terms of clustering individual positions into job groups based on tasks performed and the relative amount of time spent on those tasks, the AGM-69A Missile Electronic Equipment (316X2T) personnel formed one job type while all AGM-69A Missile Systems Analyst (316X0T) personnel were in other job types. This strongly suggests that the current structure (having two specialties) is appropriate.

The work of these specialties has remained relatively stable in recent years. There is some indication that some specialists work on other systems, such as the Air Launched Cruise Missile (ALCM). Discussions with personnel in the field and in management revealed that the ALCM system will become fully operational about 1982 and that 316X0T and 316X2T personnel will be involved in the maintenance of this system and its associated test equipment. Thus, there is a major change anticipated which may impact on these specialties.

A comparison of tasks performed by major job groups and skill level groups with the formal AFR 39-1 specialty descriptions revealed that the current specialty descriptions are fairly comprehensive. Some minor omissions were noted in the 31650T specialty description (tool room tasks and test and evaluation duties).

An examination of job interest data indicated that more 316X2T first enlistment personnel found their job interesting than do 316X0T personnel. However, only 19 percent of the first enlistment 316X2T personnel said that they would probably reenlist (versus 29 percent for 316X0T first enlistment personnel and 36 percent for first enlistment personnel in a comparative sample of mission equipment maintenance specialties). This very low reenlistment intent suggests that career manning may be a problem in the future.

APPENDIX A

TABLE I

RELATIVE PERCENT THE SPENT ON DUTIES BY THE JOB TYPES IN THE MISSILE MAINTENANCE SUPERVISORS CLUSTER

Di	DUTIES	SRAM SYSTEMS SUPERINTENDENTS (N=49)	NCOICs CONSOLIDATED TOOL ROOM (N=6)	NCOICS HISSILE CHECKOUT SECTION (N=14)	NCOICS MUNITIONS CONTROL (N=17)	NCOICS SRAM ANALYSIS SECTION (N=10)	SRAM MAINTENANCE SUPERINTENDENTS (N=12)
EDCBA	ORCANIZING AND PLANNING DIRECTING AND IMPLEMENTING EVALUATING PERFORMING MAINTENANCE MANAGEMENT AND	16 23 19 7	12 17 16 8	9 2 6 9	23 35 14 6	19 26 15 9	21 38 26 1
E4 (ADMINISTRATIVE FUNCTIONS OPERATING OR MAINTAINING AGM-69A BOOSTER SECTION	18	37	18	50 *	21 *	11 *
ж	HAINTENANCE AND PERIODIC INSPECTIONS OF AGM-69A ELECTRONIC	4	*	-	÷¢.	4	-\$¢
Н	EQUIPMENT PERFORMING FAULT ISOLATION OF AGM-69A	2	* ×	2	*	*	*
5	ELECTRONIC COMPONENTS OR EQUIPMENT CALLBRATING AND ADJUSTING AGE-69A		-je	7	-tc	-le	-jk
×	ELECTRONIC EQUIPMENT ELECTRONIC EQUIPMENT ELECTRONIC AND SERVICING MISSILE ELECTRONIC	40	-tc	-je	ή¢	-ļ¢	-je
7	ELECTRONIC EQUIPMENT PERFORMING GENERAL SHOP MAINTENANCE	2 9	10	9 11	4 2	* 1-	* ~

TABLE II
BACKGROUND INFORMATION BY JOB TYPES IN THE MISSILE MAINTENANCE SUPERVISORS CLUSTER

					MOOTO	
	SRAH SYSTEMS SUPERINTENDENTS	NCOICS CONSOLIDATED TOOL ROOM	MCOICS MISSILE CHECKOUT SECTION	NCOICS MUNITIONS CONTROL	SRAM ANALYSIS SECTION	SRAH HAINTENANCE SUPERINTENDENTS
AVERAGE NUMBER OF TASKS PERFORMED	110	65	136	87	55	39
AVERAGE PAY GRADE	7	6.2	5.9	9	5.6	7.8
AVERAGE NUMBER OF PERSONNEL SUPERVISED	5.4	5.2	8.4	4.2	1.5	4.1
DAFSC						
31630T	20	20	***	40	***	•
31650T	2 84	8 80			2 6 6	2 6
31670T	34 8 8	100%	1001	* a-	3 800	2 6
31632T	0	20		200	2 8	£ 6
316527	200	200	20	20	200	4 60
31672T	34	20	0	20	200	
31699	267	200	0.00	12%	8 80	203
CEM CODE 31600	1 3·2	K 0	20	100	**	33\$
AVERAGE MONTHS IN CAREER LADDER	131	121	97	86	115	182
AVERAGE MONTH TAFMS	225	192	153	186	140	257
PERCENT IN FIRST ENLISTMENT	2%	80	20	20	20	6

TABLE 111

JOB INTEREST AND RELATED DATA BY JOB TYPES IN THE MISSILE MAINTENANCE SUPERVISORS CLUSTER (PERCENT RESPONDING)

SRAM MAINTENANCE SUPERINTENDENTS		0 0 8 92		0 67 25		0 77 8	33 0 42 42
NCOICS SRAM ANALYSIS SECTION		10 10 20 20		0 0 0 0 0		30 50 20	20 20 20 40
NCOICS HUNITIONS CONTROL		90988		0 13 56 31		75 28 0 0	0 12 23 4 44 12 53 9
MCOICS MISSILE CHECKOUT SECTION		0 14 21 65		28 72 0		29 29 7	0 0 21 64
NCOICS CONSOLIDATED TOOL ROOM		3300		17 17 10 0		677	17 17 0 16 50
SRAM SYSTEMS SUPERINTENDENTS		2 2 2 4 7 0 4 7 0 4 4 7 0 4 4 4 4 4 4 4 4 4 4		2 8 8 69 21		0 16 67 17	2 2 35 14 4 8 4 1
	I FIND MY JOB:	NO RESPONSE DULL SO-SO INTERESTING	MY JOB UTILIZES MY TALENTS:	NO RESPONSE NOT AT ALL TO VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENTLY TO PERFECTLY	MY JOB UTILIZES MY TRAINING:	NO RESPONSE NOT AT ALL TO VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENTLY TO PERFECTLY	I PLAN TO REEMLIST: NO RESPONSE NO PROBABLY NO PROBABLY YES YES

TABLE IV RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB TYPES IN THE FLIGHTLINE MAINTEN

	FB-111 WEAPONS	(N=23) HEBBERS (N=23) 1
E CLUSTER	FB-111 WEAPONS RELEASE	TEAM CHIEFS (N=14) 7 5 4 13 13 29 21 11 10
THE HAINIENANCE CLUSTER	B-52 AIRCRAFT CHECKOUT	(N-195) (N-195) 3 3 4 5 4 5 8 8 8 7 7 7 7 7
	B-52 AIRCRAFT CHECKOUT TEAM CHIEFS	(N=64) 13 13 18 18 27 27 27 21
	DUTIES	A ORGANIZING AND PLANNING B DIRECTING AND IMPLEMENTING C EVALUATING D TRAINING E PERFORMING HAINTENANCE MANAGEMENT AND ADMINISTRATIVE FUNCTIONS E PERFORMING OR MAINTAINING AGM-69A BGOSTER SECTION F PERFORMING OFFERATIONAL CHECKS, SELF TESTS, AND PERIODIC INSECTION OF AGM-69A ELECTRONIC EQUIPMENT OR EQUIPMENT OR EQUIPMENT CALIBRATING AND ADJUSTING AGM-69A ELECTRONIC EQUIPMENT COMPONENTS K REPAIRING AND SERVICING MISSILE ELECTRONIC EQUIPMENT COMPONENTS L PERFORMING GENERAL SHOP MAINTENANCE

TABLE V

BACKGROUND INFORMATION BY JOB TYPES IN THE FLIGHTLINE MAINTENANCE CLUSTER

	B-52 AIRCRAFT CHECKOUT TEAM CHIEFS	B-52 AIRCRAFT CHECKOUT MECHANICS	FB-111 WEAPONS RELEASE TEAM CHIEFS	FB-111 WEAPONS RELEASE TEAM MEMBERS
AVERAGE NUMBER OF TASKS PERFORMED	81	67	75	87
AVERAGE PAY GRADE	5.0	3.6	4.4	3.3
AVERAGE NUMBER OF PERSONNEL SUPERVISED	6		8	
DAFSC				
316307	**0	12%	*0	17%
31650T	36.5	3 94	862	788
31670T	61%	247	21%	36
31632T	%0	20	20	20
31652T	20	20	20	20
31672T	%0	20	*0	%0
31699	%0	20	%0	*00
CEM CODE 31600	%0	**0	%0	% 0
AVERAGE MONTHS IN CAREER LADDER	71	28	67	17
AVERAGE MONTHS TAFMS	1111	/41	85	29
PERCENT IN FIRST ENLISTMENT	3%	74%	14%	87%

TABLE VI

JOB INTEREST AND RELATED DATA BY JOB TYPES IN THE FLIGHTLINE MAINTENANCE CLUSTER (PERCENT RESPONDING)

	B-52 AIRCRAFT CHECKOUT TEAM CHIEFS	B-52 AIRCRAFT CHECKOUT MECHANICS	FB-111 WEAPONS RELEASE TEAM CHIEFS	FB-111 WEAPONS RELEASE TEAM MEMBERS
FIND MY JOB:				
NO RESPONSE DULL SO-SO INTERESTING	3 20 29 48	20 30 47	7 114 21 58	4 6 5 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Y JOB UTILIZES MY TALENTS:				
NO RESPONSE NOT AT ALL TO VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENTLY TO PERFECTLY	0 40 55 5	2 66 6 7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	27 27 56 7	0 7 7 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
IY JOB UTILIZES MY TRAINING:				
NO RESPONSE NOT AT ALL OR VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENTLY TO PERFECTLY	556 32 8	38 57 4	0 74 36 0	7 90 0
PLAN TO REZNLIST:				
NO RESPONSE NO PROBABLY NO PROBABLY YES YES	5 12 16 20 47	32 29 18 18	29 13 29 29	26 43 13 19

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TABLE VII
RELATIVE PERCENT TIME SPENT ON DUTIES BY THE JOB TYPES IN THE VACE CLUSTER

S31	FB-111 VACE MECHANICS (GRP210, N=5)	B-52 VACE MECHANICS (GRP314, N=39)	VACE NCOICS (GRRP359, N=17)
A TABLE DE TABLE DE TABLE DE LA COMPANSION DE LA COMPANSI	40	-74	\$
OKGANIZING AND FLANNING	1	2	00
DEFECTION AND THE LEGISLATION	1	2	9
EVALUALING	- 4	×	5
INAINING MAINTENANCE MANACEMENT AND ADMINISTRATIVE FUNCTIONS	7	9	12
FEMOURING INTEREST PROPERTY OF A STATE OF MAINTAINING TO MAINTAINI	m	6	m
PERSONAL PRINCIPLE INTERIOR AND	私	40	4
PERFORMING OPERATIONAL CHECKS, SELF TESTS, AND PERIODIC INSPECTIONS OF	15	16	11
AGM-69A ELECTRONIC EQUIPMENT			
PERFORMING FAILT ISOLATION OF AGM-69A ELECTRONIC COMPONENTS OR EQUIPMENT	11	15	11
CALIBRATING AND AD HISTING AGM-69A ELECTRONIC EQUIPMENT	18	16	12
PEPATRING AND SERVICING MISSILE FLECTRONIC COULPMENT OR COMPONENTS	29	24	18
PERFORMING GENERAL SHOP MAINTENANCE	15	13	10

TABLE VIII

BACKGROUND INFORMATION BY JOB TYPES IN THE VACE CLUSTER

	VACE NCOICS 198 4.9 2.5	0 0 0 0 0 0 0 0 0	63 96 23
	B-52 VACE MECHANICS 144 3.5	0 0 20 69 11 0	32 39 72
The state of the s	FB-111 VACE MECHANICS 108 3	0 0 0 0 0 0 0	21 100
BACKGROUND INICIALITY	AVERAGE NUMBER OF TASKS PERFORMED AVERAGE PAY GRADE AVERAGE NUMBER OF PERSONNEL SUPERVISED	DAFSC 31630T 31650T 31650T 31632T 31632T 31672T 31699 5FM CODE 31600	AVERAGE MONTHS IN CAREER LADDER AVERAGE MONTHS TAFMS PERCENT IN FIRST ENLISTMENT

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TABLE IX

JOB INTEREST AND RELATED DATA BY JOB TYPES IN THE VACE CLUSTER

	VACE		23 29 48		0 12 88 0		0 18 76 6		6 24 29 17 24
(PERCENT RESPONDING)	B-52 VACE MECHANICS		3 8 63		0 28 61 1		0 13 79 8		0 446 23 28 5
	FB-111 VACE MECHANICS		20 20 0 60		0 0 100 0		20 20 80 0		20 40 20 20 0
THERESI W		I FIND MY JOB:	NO RESPONSE DULL SO-SO INTERESTING	MY JOB UTILIZES MY TALENTS:	NO RESPONSE NOT AT ALL TO VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENTLY TO PERFECTLY	MY JOB UTILIZES MY TRAINING:	NO RESPONSE NOT AT ALL TO VERY LITTLE FAIRLY WELL TO VERY WELL EXCELLENTLY TO PERFECTLY	I PLAN TO REENLIST:	NO RESPONSE NO PROBABLY NO PROBABLY YES YES

